DOCUMENT RESUME

ED 481 936 CG 032 660

AUTHOR	Bloom, John W., Ed.; Walz, Garry R., Ed.
TITLE	Cybercounseling & Cyberlearning: An Encore.
INSTITUTION	ERIC Clearinghouse on Counseling and Student Services, Greensboro, NC.
SPONS AGENCY	Department of Education, Washington, DC.
ISBN	ISBN-1-56109-103-0
PUB DATE	2003-11-00
NOTE	417p.
CONTRACT	ED-99-CO-0014
AVAILABLE FROM	ERIC Counseling and Student Services Clearinghouse, University of North Carolina at Greensboro, 201 Ferguson Building, Greensboro, NC 27402. Tel: 336-334-4114; Tel: 800-414-9769 (Toll Free); Fax: 336-334-4116; e-mail: ericcass@uncg.edu; Web site: http://ericcass.uncg.edu/ .
PUB TYPE	Books (010) -- ERIC Publications (071)
EDRS PRICE	EDRS Price MF01/PC17 Plus Postage.
DESCRIPTORS	*Counseling; *Counseling Services; Counselor Client Relationship; Counselor Supervision; *Counselor Training; *Interpersonal Relationship; Mental Health; Online Courses; Online Searching; *World Wide Web
IDENTIFIERS	*Online Counseling

ABSTRACT

As a follow-up to "Cybercounseling and Cyberlearning: Strategies and Resources for the Millennium," this book offers information beneficial to the counseling practice and counselor education classrooms. Part 1, "CyberLearning," contains the following chapters: (1) "Designing Web Pages Accessible to All" (J. E. Wheaton & P. F. Granello); (2) "Counselor Preparation for a Cyber World: Curriculum Design and Development" (J. Lewis & D. Coursol); (3) "Multimedia in the Counselor Education Classroom: Transforming Learning with Video Technology" (M. Baltimore); (4) "Planning for CyberLearning: A Framework for Counselor Educators" (A. C. Albrecht & D. G. Jones); (5) "Converting Counselor Luddites: Winning over Technology-Resistant Counselors" (M. Jencius & S. Paez); (6) "Supporting CACREP Programs and Curriculum with World Wide Web Resources" (T. Keller & R. Goodman). Part 2, "Cybercounseling," includes: (7) "Understanding Online Counseling Services through a Review of Definitions and Elements Necessary for Change" (J. M. Tyler & L. J. Guth); (8) "The Evolution of a Distance Career Counseling Model: Implications for Training, Practice and Supervision of Cybercounselors" (J. Malone, K. Miller, & R. Miller); (9) "Testing and Counseling: A Marriage Saved by the Internet" (W. P. Jones); (10) "E-Mail Rules! Organizations and Individuals Creating Ethical Excellence in Telemental-Health" (D. L. Mitchell & L. Murphy); (11) "Cultural and Global Linkages of Emotional Support through Online Support Groups" (J. Gary); (12) "Implementing Internet Web Sites in Counseling Services" (J. P. Sampson, Jr., D. L. Carr, J. Panke, S. Arkin, S. H. Vernick, & M. Minvielle); (13) On-Demand Interactive Clinical Supervision Training: Using Multimedia for Building Basic Skills in Supervision" (M. Baltimore & L. Brown). Part 3, "CyberResearch," includes: (14) "Development of a CD-ROM for Pedagogical

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Research" (P. Granello & J. Wheaton); (15) "Using Web-Based Surveys to Conduct Counseling" (D. H. Granello & J. E. Wheaton); (16) "Researching the Cybercounseling Process: A Study of the Client and Counselor Experience" (J. Lewis; D. Coursol, & K. H. Wahl); (17) "Incorporating Distance Learning into Counselor Education Programs: A Research Study" (R. A. Wantz, D. Tromski, C. J. Mortsolf, G. Yoxtheimer, S. Brill, & A. Cole); (18) "Interpersonal Communication in Behavioral Telehealth: What Can We Learn from Other Fields?" (K. Collie). (Contains numerous references and 5 appendixes.) (ADT)

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An Encore

Edited by
John W. Bloom
Garry R. Walz

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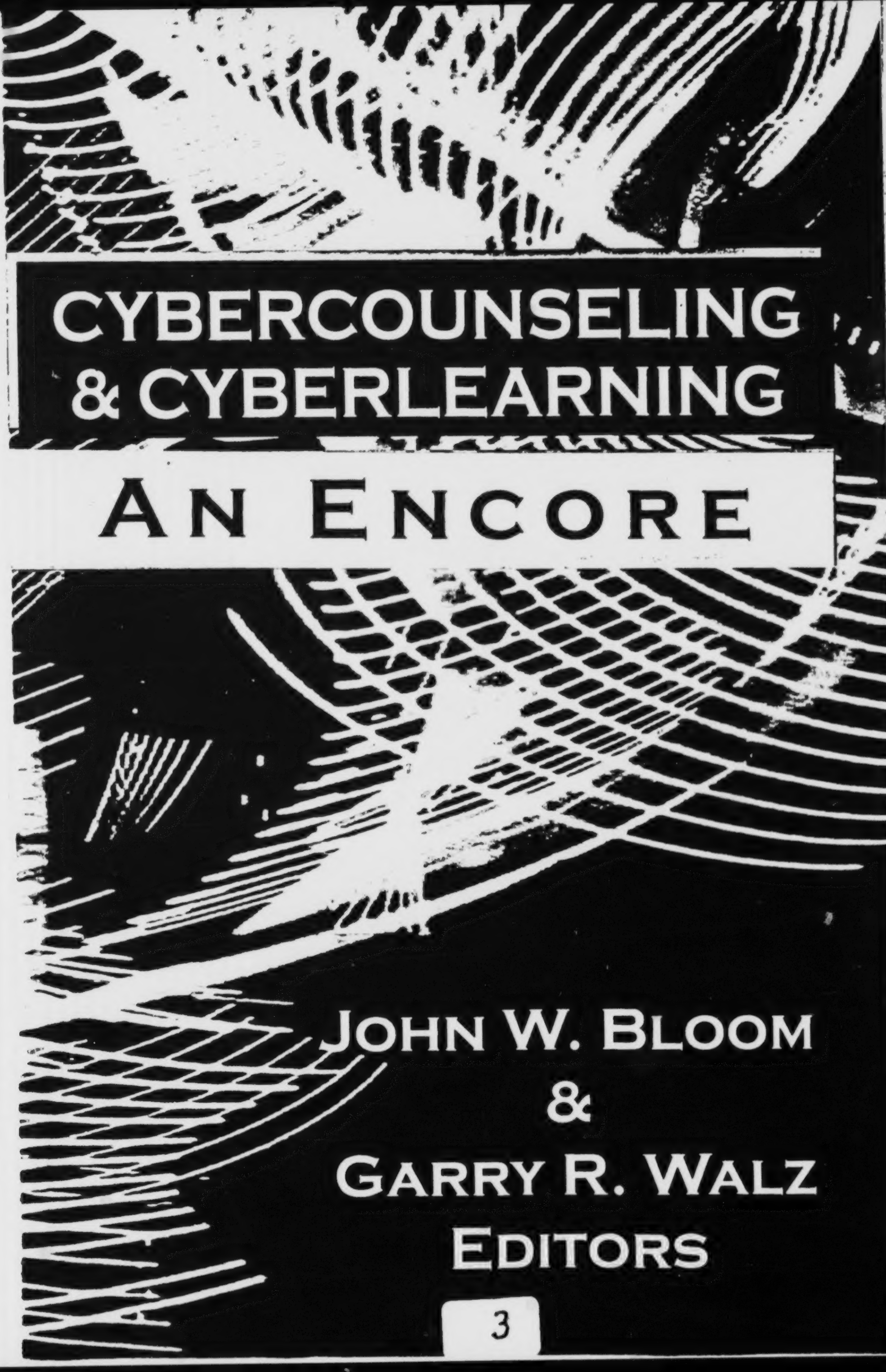

CYBERCOUNSELING & CYBERLEARNING

AN ENCORE

JOHN W. BLOOM
&
GARRY R. WALZ
EDITORS

Cybercounseling and Cyberlearning

AN ENCORE

Editors
John W. Bloom
Garry R. Walz

CYBERCOUNSELING AND CYBERLEARNING:
AN ENCORE

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ISBN 1-56109-103-0

CAPS Press
A Division of Counseling Outfitters, L.L.C.
PO Box 35077
Greensboro, NC 27402-5077

American Counseling Association
5999 Stevenson Avenue
Alexandria, VA 22304

This publication is funded in part by the U.S. Department of Education, Office of Educational Research and Improvement, Contract No. ED-99-CO-0014. Opinions expressed in this publication do not necessarily reflect the positions of the U.S. Department of Education, OERI, or ERIC/CASS.

Preface

Literally, the word *encore* is a request by an audience for a repeat or additional performance. Implicit in the term is the idea that an audience is pleased with what they have seen or heard and *want more*. From our standpoint, the operative part of the definition is the *want more*. I hope that our reading of the volume of sales as well as use of and references to the first volume as an indicator of a desire for more information, e.g., an updated edition, is a valid one. Certainly the first volume has been recognized as the first of its kind, i.e., a publication devoted to cybercounseling and cyberlearning and one for which there was a clear and strong need by both counselor educators and practicing counselors.

This volume had as its main goal to accomplish two major objectives. First, we wanted to provide an update on the topics covered in the first volume including research results and validated practices wherever possible. Secondly, we wished to expand the coverage to new areas and topics wherever they were relevant and available. As to how successful we were in accomplishing what we set out to do we leave to your judgment.

This has been a collaborative effort from the start with ACA's active support and interest in co-publishing the monograph. The ACA Foundation was also an active and enthusiastic partner in the development of the two publications. Donna Ford, both as ACA President and chair of the ACA Technology Committee, was also instrumental in the development of both monographs.

Under John Bloom's steady hand early on, the monograph made steady progress; but as we entered the production stage, the completion of the monograph was slowed almost to a halt due to numerous delays brought on by the decision to eliminate the ERIC clearinghouses. Though there have been countless unexpected delays and obstacles we have had to overcome, we are proud that we were able to overcome them and to offer what we believe will be an eminently useful monograph. We hope you will find it so as well. We welcome hearing from you.

Garry R. Walz
Co-Director, ERIC Clearinghouse on Counseling & Student Services

Richard Yep
Executive Director, American Counseling Association

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Introduction

John W. Bloom

We know that technology has invaded *every* aspect of our life when a January 2002 episode of the television quiz show *Jeopardy* features a category entitled 'Hackers' and when one of the questions in the Genus 5 edition of *Trivial Pursuit* asks, "What nation has 115 people without fresh drinking water for every person who uses the Internet?" (answer? India) Further, the question has been raised as to whether or not it is still necessary for people to learn how to write neatly and legibly because today's 'writers' all use word processors ("Hot Topic Penmanship," 2002). And one final example...still reeling from the after-effects of the terrorist devastation, less than one month after September 11, I observed firsthand the hypnotic lure of Manhattan's many Internet cafes.

In spite of these and other cyber changes, two things don't seem to change. One is that technological advances will continue, and at accelerating rates, and the other is that there will always be Luddites. Luddite is a term introduced in this text by Dr. Marty Jencius and Susan Paez in Chapter 5, for those who disdain technology. Luddites are British workers who, between 1811-1816, rioted and destroyed labor-saving textile machinery they thought would diminish employment.

However, history shows that Luddite-like thought gains us little in the long run and that, in today's vernacular, the CD-ROM is more likely to be half full than half empty! Eventually, humans always find solutions to the legal, ethical, and moral challenges they face. So, too, do counselors and counselor educators, as facilitators of the communication and counseling process, find solutions to their professional problems, issues, and concerns.

We can be reminded of this innate resourcefulness when we think about the communication problems generated in outer space. From Sputnik to Mir, puffiness and other distortions of facial features have made it difficult to know whether the space traveler is laughing or frowning. Further, when astronauts try to communicate with each other, a lack of eye contact resulting from their inability to remain in a stationary position has been problematic. Finally, distortion of both voice clarity and volume continues to be a significant barrier to effective communication. So have we abandoned the space program or have space pioneers discovered new ways to communicate?

Referring again to the events of September 11, 2001, I observed firsthand my own adaptability when called upon to serve as a Red Cross

Disaster Mental Health Worker. Many things I had been taught as critical components of the counseling process just didn't work in New York City. I was most effective when I didn't make eye contact. I was effective in spite of not knowing the other person's ethnicity. I encouraged people to talk openly about their spiritual beliefs and support systems. The list of adaptations goes on.

So is the CD-ROM half empty? Are there still problems associated with technology-assisted distance counseling and distance learning? Certainly! One example of a continuing danger is the potential for client fraud. Because most cybercounselors still do not have video capabilities with which to see their clients, some clients will falsify their identity, pretending to be someone they are not. If clients do this at the same rate that *eBay* customers commit fraud, statistics say the CD-ROM is more than 99 percent full. Only one one-hundredth of 1 percent of all eBay listings resulted in a confirmed case of fraud. With an average of 9 million items for sale on any given day, that works out to an estimated 900 fraudulent items on the site each day. As *e-Bay* covers each transaction up to $200, most customers have adapted by learning to be more careful when making purchases over $200. ("The e-Bay Way", 2002).

Is the CD-ROM half full? Our ethical duty as counselors and counselor educators is not to fight change and condemn its manifestations as being unprofessional or unethical. Rather we need to do everything in our power to embrace the benefits of change, to minimize the dangers of change, to work to eradicate the ethical dilemmas resulting from change, and to seek ways to maximize the benefits of change for our clients and students. This half-full point of view is consistent with the *Code of Ethics* of the American Counseling Association which points out that the primary responsibility of counselors is to respect the dignity and to promote the welfare of clients (Section A.A.1.a.) and that counselors encourage client growth and development in ways that foster the clients' interest and welfare (Section A.A.1.b.) (American Counseling Association, 2002).

Thoughts on Cyberlearning

For many, the question is no longer "Do we prepare?" but, "How do we prepare?" counselors for the real world they are about to enter. After all, many of today's counselor education students have much more technology savvy than many of their instructors. The chapters in the Cyberlearning section describe

1. Designing Web Pages That Are Useable and Accessible to All
2. Counselor Preparation For a Cyber World: Curriculum Design and Development

3. Multimedia in the Counselor Education Classroom: Transforming Learning with Video Technology
4. Planning for CyberLearning: A Framework for Counselor Educators
5. Converting Counselor Luddites: Winning over Technology-Resistant Counselors
6. Supporting CACREP Programs and Curriculum with World Wide Web Resources

Thoughts on Cybercounseling

Understanding the cybercounseling process has been difficult at best over the past decade due to the elusive and often experimental nature of the cybercounseling process. The Cybercounseling section presents information on:

7. Understanding Online Counseling Services Through a Review of Definitions and Elements Necessary for Change
8. The Evolution of a Distance Career Counseling Model: Implications for Training, Practice and Supervision of Cybercounselors
9. Testing and Counseling: A Marriage Saved by the Internet?
10. E-mail Rules! Organizations and Individuals Creating Ethical Excellence in Telemental-Health
11. Cultural and Global Linkages of Emotional Support Through Online Support Groups
12. Implementing Internet Web Sites in Counseling Services
13. On-Demand Interactive Clinical Supervision Training: Using Multimedia for Building Basic Skills in Supervision

Thoughts on Cyberresearch

Far more is known today about the cyberlearning and cybercounseling processes than in the past, however what we have learned about those processes is far from conclusive. For example, the dramatic work of Day and Schneider (2000), portions of which are explained in the first volume of *Cybercounseling and Cyberlearning,* has yet to be replicated and the techniques suggested by Collie, Mitchell and Murphy (2000) are still considered gimmicky by some and unprofessional by others.

Nonetheless, not only is Cyberresearch methodology improving, but the body of Cyberresearch is becoming more substantive every day. In this volume you will find chapters addressing:

14. Development of a CD-ROM for Computer-Aided Instruction and Research
15. Using Web-Based Surveys to Conduct Counseling Research
16. Researching the Cybercounseling Process: A Study of the Client and Counselor Experience
17. Incorporating Distance Learning into Counselor Education Programs: A Research Study
18. Interpersonal Communication in Behavioral Telehealth: What Can We Learn from Other Fields?

Conclusion

As usual, the future is as elusive and as unpredictable as ever, but within three to five years we will have access to Internet2 and all it has to offer. I mention more specifics in the Cybersampler section.

In addition other advancements are announced almost daily. For example, currently select faculty members at The Ohio State University have been identified to experiment with Interactive Intelligence's unified messaging feature, a part of its Communite product, that enables users to process voice mail, fax and e-mail messages from a single in-box ("Ohio State University," 2002). The company's unified messaging feature also includes text-to-speech which gives users the ability to listen to fax and e-mail messages via the phone. The company's one-number follow-me service can be set up to sequentially dial a home number, cell number, or any other number depending on the importance of the call. Users can also set their status via the phone — such as "Available" or "In A Meeting" — using the company's presence management feature. Communite runs on the Windows 2000 operating system and supports many popular e-mail systems, including Microsoft Exchange, Lotus Notes, Novell Groupwise and iPlanet Messaging Server.

We also know that probably by the time this book appears in print we all may be using new URL suffixes such as dot-info, and dot-biz ("Your dot-com," 2002). The first suffixes were .com (commercial), .org (organization), .edu (education), .gov (government), and .mil (military). As the Internet was originally designed to facilitate military and government communication in the event of a nuclear attack, no one ever anticipated running out of .com names. But just as we need more telephone area codes, we now need more suffixes, so you can also anticipate the advent of .pro for specific professions, and .name to be used for an individual's personal web site, i.e., john.bloom.name.

I hope you will find the following information beneficial to your counseling practice and in your counselor education classrooms. But remember, this volume comes out but three years after the first. Will the next volume, because of the knowledge explosion and technology growth and development, come out just two years after this, or maybe only in one?

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Cybersampler II

John W. Bloom, Ph.D., NCC

Editor Note: All Web sites listed here were accessed 8/8/02.

The first edition of *Cybercounseling and Cyberlearning* included a Cybersampler of counseling-related cyber publications and cyber Web sites for perusal by readers, particularly those with minimal familiarity of cybercounseling and cyberlearning literature or cybercounseling and cyberlearning information and services available on the World Wide Web. In the three years since that first writing there has been a steady growth in the quantity and quality of information regarding cybercounseling and cyberlearning, prompting this writer to create a second such listing while also updating information in the first.

CYBERSAMPLER ENCORE WEB SITES

1. The Center for the Study of Technology in Counseling and Career Development at Florida State University (www.career.fsu.edu/techcenter) was established by co-directors Drs. James P. Sampson, Jr. and Robert Reardon in 1986 to assist practitioners, researchers, software developers, and policy makers in improving the design and use of computer applications in counseling and career development. The Center also assists practitioners, researchers, and policy makers in improving the cost-effectiveness of career service delivery. The work of the center is institutional, state, national, and international in focus.

2. ReadyMinds (www.readyminds.com) is a customized career counseling program staffed by National Certified Counselors. This interactive service enables client and counselor to work together to develop a valuable and productive relationship that focuses on immediate needs as well as long-term career goals. The program is conducted in the comfort of the client's own surroundings via telecounseling (via the telephone) and online communication is arranged at times most convenient for the client.

3. Links to all current cybercounseling and cyberlearning ethical standards may be found at http://www.career.fsu.edu/techcenter/computer_applications/web_standards.html. Those standards include the following:

- American Counseling Association - *Ethical Standards for Internet On-line Counseling*
- American Psychological Association - *Services by Telephone, Teleconferencing, and Internet*
- Association for Counselor Education and Supervisions Technology Interest Network – *Technical Competencies for Counselor Education Students: Recommended Guidelines for Program Development*
- Association of Computer-based Systems for Career Information – *Handbook of Standards for the Operation of Computer-based Career Information Systems*
- Canadian Labor Force Development Board – *Standards for Electronic Labor Market Information*
- Health on the Net Foundation – *Honor Code of Conduct (HONcode) for Medical and Health Web Sites*
- National Board for Certified Counselors – *Core Standards for Internet Mental Health Practice and Standards for the Ethical Practice of Cybercounseling (revised)*
- National Career Development Association – *Guidelines for the Use of the Internet for Provision of Career Information and Planning Services*

4. Storm King's Stormsite (http://webpages.charter.net/stormking/) provides information on the psychology of virtual communities. There is an annotated bibliography of 23 cyber behavioral health journals or Web sites for researchers interested in the psychology of virtual communities, seven discussion groups, e-mail virtual communities that discuss the psychology of virtual communities, and 21 additional Web sites of personal web pages and individual articles.

5. *Journal of Technology in Counseling* (http://jtc.colstate.edu) is a web-based electronic journal providing counselor educators, counseling practitioners and others interested in the infusion of technology in the teaching and practice of counseling, a platform for publishing. This peer reviewed professional counseling journal represents an innovative approach to publication not seen in the counseling literature. It encourages the use of modern interactive web-publishing platforms incorporating audio and video streaming active clips and also incorporates hypertext into manuscripts as well as still graphics and active links.

6. The Indiana Career and Postsecondary Advancement Center (ICPAC) (http://icpac.indiana.edu) is one of several outstanding sites providing links to career, educational, and financial aid resources and a variety of helpful publications, including many that have been translated into Spanish.

7. International Sites – Lest American cybercounselors and cyberlearners become too ethnocentric, a small number of international Web sites are included here to show some of the advancements being made by our neighbors in the global village.

   The **Multicultural Counseling Service** staff team at Ikebukuro Counselling Centre in Tokyo, Japan (http://www.gol.com/hozumiclinic/counsellingstaff.html) includes qualified American, British, Indian, Israeli, Japanese and Mexican counselors, psychologists and therapists who provide the Tokyo area community with counseling and therapy services for English, Hebrew, Hindi, Japanese, Marathi and Spanish speaking residents. The counseling center's 37 qualified professional counselors and psychotherapists include JSCCP Board Certified Clinical Psychologists, therapists and psychologists from other countries. All are qualified in the country where they received their training and qualifications.

   Qualified practitioners who wish to explore and develop their online presence may wish to view the **Online Training Program** at OnlineCounsellors.co.uk. This 6-week certification course of study introduces Online Therapy from both a theoretical and practical stance, based on actual research and international expert opinion. All study takes place online, with the student choosing the times suitable to take part. Students are not expected to launch into live online sessions with no grounding in the method. Although this is interactive training, there are no role-playing sessions with other trainees. Instead, a new training system has been developed to enable the student to experience online email and Internet Relay Chat Therapy sessions that include the student as the observer, guiding the student to learning points and allowing the student to add thoughts and feelings about the sessions taking place. A discussion board allows students to interact with other trainees and the trainers to explore their learning and get support, and have full access to the most up-to-date resources in Online Therapy research papers and websites, including a guide to standardized Online Therapy Netiquette for Practitioners. Also available is a subscription to The Online Therapy Network, a members benefit package.

The **Counsellor Resource Centre** (http://www.crccanada.org/resources.cfm?cat=92&lang=en) is a Canadian-based international career development site with a working partnership between the International Association for Educational and Vocational Guidance (IAEVG) and Human Resources Development Canada (HRDC), including unique multi-language navigation features.

In the UK and the Republic of Ireland, where the suicide rate is particularly high, the **Samaritan** centers (http://www.samaritans.org.uk) provide crisis counseling services in almost staggering numbers. In 2001, the 203 centers received a total of 4.8 million contacts (mostly by telephone), 41% of which were silent/snap contacts, but in the remainder or 2.8 million contacts, verbal contact was established. And particularly relevant to this book, 64,000 contacts were via e-mail, up from 37,000 e-mail contacts in 2000.

The Samaritan mailbox is read every day of the year by a group of trained volunteers - all using the pseudonym "Jo". Callers are offered absolute confidentiality and do not lose the right to make their own decisions (including the decision to end their own lives). Messages (and Samaritan replies) are kept for 30 days at most and callers may ask for earlier deletion of a message.

Quite accidentally this author became one of the 42% silent/snap contacts but still received the following reply from Jo.

Hello ... I'm sorry, I don't know your name ... mine's Jo, I received your message but I'm afraid my system can't open .dat files. If you'd like to talk some more, do you think you could send your messages as plain text files please?

Perhaps, if I tell you a bit about me, you can decide whether you'd like to talk or not.

What I do is try to give emotional support to people who are distressed, or even suicidal, because it sometimes helps to talk

> things through when you're feeling this way. I know that's a terrible cliche but it does seem to work.
>
> I'll listen to whatever you say to me, but I won't pass judgment or tell you what to do. You have the right to control your own life.
>
> Everything you say to me is in complete confidence, at this end - it's between The Samaritans and you only. There are absolutely no exceptions to this.
>
> I know the name makes us sound a bit religious, but it really isn't so. It's what you think and feel that's most important not your beliefs (or lack of them).
>
> So ... do you think you would like to talk some more? If so, I do hope you'll keep in contact.
>
> Jo

8. **School counselors** continue to explore innovative, electronic means of communicating with their various publics. Most commonly, they are developing more elaborate, informative and even interactive Web sites that they themselves can create if they possess the necessary skills or they rely on district technology specialists, their own students, or commercial organizations like iHigh.com.

Cybersampling of Elementary School Web sites:
http://www.wvec.k12.in.us/burnett/bccouns/danobce.htm
http://www.falmouthschools.org/k2counseling/index.html
www.bartlesville.k12.ok.us/hoover/taylor.html

Cybersampling of Middle School Web sites:
http://outreach.rice.edu/~trsler/admin/thompson.htm
http://www.hsv.k12.al.us/schools/middle/wtms/counselor/counselor.html
www.wms.wantaghufsd.k12.ny.us/guidance/msguidance.htm

Cybersampling of High School Web sites:
www.marblehead.com/guidance
www.lockhart.k12.tx.us/lhs/Counselors counselors_corner_mainpage.html

A future-is-now consideration in some areas of the country (and worldwide) is that forward-thinking school corporations and local home builders are working together to electronically link school classrooms and the home living rooms. Sure, it can be fun to think about being able to turn on the microwave oven from your car ten minutes before arriving at your "smart home", but it is also fascinating to think about the teacher and a parent both being able to check and see just how sick Johnnie or Maria is without ever having to leave the classroom or office. Similarly, student, parent, and school counselor can videoconference with each other without having to leave "tennis practice" or "home" or "office". See http://www.21stcentury.co.uk/technology/smart_homes asp and http://www.smarthomeusa.com

9. **Bobby** (http://bobby.cast.org/html/en/index.jsp) was created by CAST (The Center for Applied Special Technology) to help Web page authors identify and repair significant barriers to access by individuals with disabilities. For directions on getting Bobby Approval see the Approval page. For more information on *Bobby WorldWide* see the About Bobby page.

10. The **Internet2** information site (www.internet2.org.) Internet2 is a consortium being led by over 190 universities working in partnership with industry and government to develop and deploy advanced network applications and technologies, accelerating the creation of tomorrow's Internet. Internet2 is recreating the partnership among academia, industry and government that fostered today's Internet in its infancy. The primary goals of Internet2 are to create a leading edge network capability for the national research community, enable revolutionary Internet applications, and ensure the rapid transfer of new network services and applications to the broader Internet community.

    Through Internet2 working groups and initiatives, Internet2 members are collaborating on advanced applications, middleware, new computing capabilities, advanced network infrastructure, partnerships and alliances, and initiatives.

11. **i-counseling** (www.i-counseling.net) was the vision of the Center for Credentialing and Education (CCE), an affiliate of the National Board for Certified Counselors (NBCC). Its goal is to offer free professional development to counselors and other mental health professionals. In addition, if users wish to receive formal continuing education hours, they can purchase an optional online quiz. Successful completion of quizzes allows users to print a certificate of completion awarding continuing education hours for their records.

Updated Cybersampler I

Publications

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2. Sampson, J.P., Jr., Kolodinsky, R.W., & Greeno, B.P. (1997). Counseling on the Information Highway: Future Possibilities and Potential Problems. *Journal of Counseling and Development,* 75, 203-212. This continues to be one of the most frequently cited cyber counseling articles of all time.

3. Peterson, D (2003). Ethics and Technology. In R. Rocco Cottone & Vilia Tarvydas (Eds.), *Ethical and Professional Issues in Counseling.* 169-202. Columbus, OH: Merrill. An expanded and revised second edition of this 1998 text appeared in 2002. More reader-friendly, this well-researched text provides exceptional coverage of the philosophical foundations of counseling and after a thorough discussion of ethical principles and standards, the authors examine ethical issues within several specialty areas. http://vig.prenhall.com/catalog/academic/discipline/1,4094,2466,00.html

4. *British Journal of Guidance and Counselling.* (1998). 26(1). The British Association for Counselling followed this special issue with Counselling Online: opportunities and risks in counseling clients via the Internet—a BAC Special Report for Purchasers and Providers (September, 1999). http://www.counselling.co.uk

Web Sites

5. National Board for Certified Counselors (http://www.nbcc.org) Standards for the Ethical Practice of Web Counseling (revised in 2001) Core Standards for Internet Mental Health Practice (deleted)

6. The Counselor Education Resource Center – Originally at the University of Louisville, Dr. Sabella has continued his work at Florida Gulf Coast University in Fort Myers. (http://coe.fgcu.edu/faculty/sabella/cerc/index.htm) Sabella's own site (www.schoolcounselor.com) and his technology articles in the American School Counselor Association's

ASCA School Counselor also offer valuable information and insights to school counselors and others.

7. Dan Mitchell and Lawrence Murphy's Therapy Online (http://www.therapyonline.ca) Mitchell and Murphy continue to be excited by the impact that Internet technology is having on the counseling profession. They say a tremendous amount of research is underway to explore the ways in which counseling professionals can be, and are, using the Net. Growing numbers of mental health practitioners are finding themselves on the Net every day in a professional role, whether to find information, advertise face-to-face services, or respond to client inquiries. While numerous ethical, legal, and professional issues need to be addressed, clients will soon demand that the online counseling option be made available to them. And they believe that the field of online counseling is about to explode into popular consciousness as a viable and novel way to receive professional counseling.

8. Psych Central, Dr. John Grohol's mental health page (http://www.grohol.com), the oldest psychology and mental health directory on the Internet, indexes over 1,500 resources and offers information on mental health disorders, symptoms, treatments, and interactive online quizzes.

   Enpsychlopedia.com offers a searchable interface to Psych Central, as well as about a dozen other mental health and psychology Web sites, offering a subject-specific guide to 40,000 psychology and mental health resources online. The simple, free *OpenJournal* (alternately called a blog, a weblog, a diary, or a journal) manages and maintains Web-based musings and writings from a completely Web-based interface (no more FTP, manual archiving, etc.). The Personal Open Directory provides a powerful directory-based search function from within a Web site, with data from the Open Directory Project. Mainly for Webmasters of larger sites. The 2002/2003 edition of *The Insider's Guide to Mental Health Resources Online* is now available. *Liviant LLC* offers behavioral healthcare organizations an inexpensive, dynamic, rapid-deployment Web portal, featuring world-class news and content from Psych Central, Enpsychlopedia, and other professional sources. The *Online Computer Buying Guide* is for ordinary users interested in purchasing a computer to read others' experiences with various brand names. Mental Help Net (http://mentalhelp.net)

9. CyberTowers (www.cybertowers.com) is a collaborative effort between California psychologist Marlene M. Maheu, Ph.D. and her staff of HTML/CGI programmers, designers and developers. They have been involved in the construction of the TelehealthNet, the DrMarleneMaheu, and the WWW e-zine SelfhelpMagazine websites. Maheu, a member of the American Counseling Association's Cyber Technology Committee, addresses various clinical issues involving service delivery via technology and the Internet, such as psychotherapy, cyber-affairs, self-help, and smoking cessation.

10. Martha Ainsworth's Metanoia (www.metanoia.org) Metanoia means "a change of mind" and the mission of Metanoia is to break down barriers that keep people from getting the help they need. Ainsworth, a journalist by profession, still offers a Directory of Internet Therapists (http://www.metanoia.org/imhs/directry.htm) Thoughtful pieces include 'Talk to a Therapist Online' and 'How to Choose a Competent Counselor' as well as appropriate words for site visitors who might be suicidal.

11. ERIC Clearinghouse on Counseling and Student Services (http://ericcass.uncg.edu) This site is your gateway to exemplary human development resources.

12. ERIC/CASS and NOICC's International Career Development Library (http://icdl.uncg.edu) ICDL is a free, online collection of full-text resources for counselors, educators, workforce development personnel, and others providing career development services.

13. U.S. Department of Labor's America's Career Kit - This site has continued to expand its services to now include:

America's Job Bank (http://www.ajb.org).

Search through a database of over one million jobs nationwide, create and post resumes online, or set up an automated job search.

America's Career InfoNet (http://www.acinet.org/acinet/)

Time for a career move? Find wage and employment trends, occupational requirements, state-by-state labor market conditions, millions of employer contacts nationwide, and the most extensive career resource library online. Smart career decisions start here!

America's Service Locator (http://www.servicelocator.org/)
ASL connects you to local offices providing the
employment and training services you need!

Cybercounseling
and
Cyberlearning
AN ENCORE

Editors
John W. Bloom
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Chapter One

Designing Web Pages That Are Usable and Accessible To All

Joe E. Wheaton and Paul F. Granello

The Internet is a growing source of information for persons worldwide, but for many people with disabilities (especially visual disabilities) the Internet can be a confusing jumble of images, frames, scripts, and colors that make little sense. Anyone who has spent any time at all on the Web has encountered text that is barely visible against the background, links that tell you nothing about what will happen when you "click here," and pages that go beyond the edges of the screen. It takes little imagination to conceptualize what these features must be like to a person who cannot see the screen. To acquaint yourself with the problem, turn off the images in your browser and link to some of your favorite Web pages (To do this, click on *Tools*, then on *Internet Options*, then *Advanced*. Now scroll down to *Multimedia* and uncheck the *Show Pictures* box. If you are on a web page, you will need to *Refresh* it. Also, depending on how you have your browser set up, you may still see pictures on the pages you most recently visited because they are loaded from your cache.). Try several pages and follow some of the links to other sites on the Web, and see if you can interpret them.

What you are witnessing is one of the most common problems on the Web and one of the easiest to fix, yet it remains commonplace. Another way to conceptualize what a person who is blind "sees" when reading a Web page is to imagine a radio announcer of a baseball game. The announcer needs to describe all the action to a person who cannot see the game. Good radio announcers can make the game come alive. The goal of a good Web page designer should be to make your pages come alive for your audience, regardless of their physical or mental abilities.

Although learning how to make Web pages accessible to all takes some effort, it is effort well spent for one very good reason: accessibility is for everyone. What does that mean? Creating accessible Web pages is making better Web pages, which are Web pages that will convey your message clearly and succinctly to the widest audience. There are, of course, legal requirements that Web pages be accessible, but those currently only apply to persons or organizations wishing to contract with the federal government, although eventually these legal requirements may expand to Web sites providing a public service (such as university courses). Nevertheless, persons wishing to get their message to as many people as possible will find that the accessibility guidelines offer the best way to ensure this happens.

This chapter gives a brief overview of the two main laws related to accessibility (the Americans with Disabilities Act and Section 508 of the Rehabilitation Act). We then address the 14 guidelines developed by the Web Accessibility Initiative (WAI). Finally, we identify free resources for Web page designers.

Legal Background

In 1992, the Americans with Disabilities Act (ADA) officially went into effect (Americans with Disabilities Act of 1990). Although the ADA says nothing about Web pages per se, it does mandate that commercial establishments, public accommodations, and telecommunications (in the act these are mainly telephones) must be accessible. Moreover, the ADA mandates that state and local governments must make "programs accessible to individuals with disabilities and [provide] equally effective communications" (U.S. Department of Justice, 1991, Title II, Summary section), although "effective communication" was left largely undefined. Whether the Web pages of commercial establishments and public accommodations are covered under the ADA has yet to be decided by the courts, but it seems logical that the same rules would apply to both the "bricks and mortar" establishment and the "virtual" establishment on the Internet. It also follows that if state and local governments must conform to Section II of the ADA, then pressure will grow for others to do the same.

Although the ADA has served as the basis for specific guidelines for buildings through the ADA Accessibility Guidelines for Buildings and Facilities (ADAAG; http://www.access-board.gov/adaag/html/adaag.htm), it does not provide such guidelines for Web pages. However, Section 508 of the Rehabilitation Act (http://www.access-board.gov/adaag/html/adaag.htm) now supplies the specifics for Web pages. Section 508 says that federal employees or members of the public seeking information from the federal government shall have the same access to such information as persons without disabilities, provided that doing so does not create an "undue burden" to the agency:

> [When] Federal agencies develop, procure, maintain, or use electronic and information technology, they shall ensure that the electronic and information technology allows

> Federal employees with disabilities to have access to and use of information and data that is comparable to the access to and use of information and data by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. Section 508 also requires that individuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities, unless an undue burden would be imposed on the agency. (Architectural and Transportation Barriers Compliance Board, 2000)

Some might say that Section 508 will have little effect on most Web pages as only a handful of individuals and very few companies have pages that will be impacted. Although this probably is true, Section 508 has other far-reaching effects. The greatest such effect may be through heightening awareness of the issue of accessibility. This is important in that making Web pages accessible is more a matter of awareness than technical skill (Paciello, 2000). For example, Wheaton, Chovan, O'Briant, and Howell (2001) examined 80 "welcome" pages (the first page of a Web site) using a validation program called Bobby (more about Bobby at the end of this chapter). They found 64% of the pages failed to meet minimal accessibility standards but that most of the errors were relatively easy to repair. For example, the most common error was poor contrast between text, images, and background. This type of error is not only easy to repair, it illustrates the need for simple, good Web page design skills that improve the Web for all readers.

A second far-reaching effect of Section 508 is that now standards exist for defining accessible Web pages. With the approval of the accessibility standards related to Section 508, courts now have specific guidelines that define accessibility. Consequently in the future we may see the Section 508 standards expanded to include the Web pages of the states, businesses, and universities doing business with the federal government much as the other sections of the Rehabilitation Act apply to these entities. If this prediction is true, Web page designers would be well advised to create accessible Web pages now, which is always easier than fixing poorly designed Web pages in a rush to comply with new standards.

In the next section we present guidelines for Web page development advanced by the Web Accessibility Initiative (WAI; http://www.w3.org/WAI/). The Web Accessibility Initiative is dedicated to promoting the development of accessible Web pages through training and research. It has identified 14 primary areas that need to be addressed to make pages accessible. And although most Web pages are not accessed using screen readers or text only browsers, the WAI guidelines improve the rendering of Web pages for all users. Moreover, the Web is now being accessed by devices much different than the traditional monitor attached to a computer and these new devices bring additional demands for Web page authors. For example, WebTV uses a low-resolution monitor (the television screen) and the PDA (personal data assistant) uses a very small screen to view pages that arrive to the device over low bandwidth. Thus, Web pages that are accessible will demonstrate good Web design principles and well-designed pages will be viewable by the greatest number of users.

Before discussing the WAI guidelines, a brief overview of screen readers may be helpful to readers unfamiliar with this technology. Text on the computer screen can be translated into speech by specialized software called screen readers. There are general screen readers that read everything on the screen including the icons on the desktop, email, and word processing documents (e.g., JAWS) and programs for reading only Web pages (e.g., HomePage Reader). These commercial products are becoming more sophisticated and can work with many design elements such as tables and frames. There are also text only readers such as LYNX (http://lynx.isc.org/release/) although these are less widely used.

We advocate making Web pages accessible through two methods: changing the interface and changing the user. In the next section we discuss the former, using the guidelines from the Web Accessibility Initiative as our guide. Then we discuss ways of "changing" the user by providing relevant information about your Web site that demystifies its structure and content.

Changing the Interface: Web Accessibility Initiative Guidelines

1. Provide Accurate Alternative Text for Audio/Video Images

For our purposes, audio/video representation will be defined as either static images (photos, icons, charts, drawings, etc.) or as movable images (e.g., video). To persons using screen readers, or for those with images turned off (a common practice for persons on slow connections), images either do not show up at all or can be very confusing. Failure to correctly identify images is probably the most widely cited error in Web page construction; it is also one of the easiest errors to repair. To make images identifiable means to provide alternative text for each image. All the major Web authoring tools have a method of providing an "alt-tag" but to be helpful the tags must be meaningful. Depending on the importance of the image, the author can choose to have the image skipped, give a short description, or provide a link to a longer description. When would you do each? In cases when authors use images in layout as spacers, adding an alt-tag that says "spacer" is just extra verbiage and adds nothing to understanding the site. Such images can be "skipped" by placing a single space as the alt-tag. A short description (usually less than 256 characters) might be used for an image that is worth knowing about but can be easily described. Company logos often meet these criteria. Another use of a short description can be a picture of a person. Unless it is critical that everyone know you are bald, wear a beard, or have a tattoo on your nose, then simply saying "Picture of Ms. Jones" is sufficient.

There are, however, images that are central to understanding important content. Graphs, for example, are rendered as images on a Web page and this is critical information that readers need to know. There are two ways to address this problem; probably the safest way is to use both (redundancy can be a virtue). The best way is to provide an explanation of the graph on the Web page, preferably before the graph. Placing the description before the graph tells readers the importance of the graph and its interpretation before they encounter it. After the explanation, they can then refer to the graph for clarification. The advantage of placing the explanation on the Web page is that everyone can benefit from the explanation. Graphs (and tables too) can be difficult for many persons, regardless of ability. Additional information is almost always helpful.

A second method of providing additional information to critical visuals is through the long description tag (LONGDESC tag or the D-link). These links refer the reader to a separate page where additional information is given about the image. This requires creating another page and inserting the link. The reason why this might be used in addition to the description on the original Web page is because you can provide information specific to the layout of the graph (in this example) that would be obvious to a person with vision. Such information might include details about the scaling, number of increments on each axis, etc.

Using a link to a new page raises the issue of whether to open new pages in the same window or in a new window when making links. Generally we believe it is better to have the new page open in the existing window and telling the reader to return to the main page by hitting the browser's "Back" key or the Alt-Left arrow key combination. We believe there is less chance for confusion or of the reader becoming lost if this method is used. There are, of course, times when it is advantageous to open a link in a new window. Persons who use frames to layout their pages might find readers prefer to have links open in new windows so the whole page can easily be seen and printed (we should add that we do not recommend the use of frames for many reasons and discuss them here only as an example). When opening pages in new windows, however, you must tell your reader this will happen. Otherwise multiple copies of the browser will be open and navigation back to the original page may be difficult.

So far we have been talking about static images (photos and graphics), however video will probably become increasingly common as the technology improves and bandwidth increases. Video requires a special alt-tag, if you will – captioning. We are all familiar with captioning on television programs and all televisions currently manufactured in the United States must include captioning ability. Captioning can be accomplished by many of the video editing programs, but free captioning software (called MAGpie) can be downloaded from the public TV station, WGBH, in Boston. (http://ncam.wgbh.org/Webaccess/magpie).

Not surprisingly, captioning is much more complex and time consuming than creating an alt-tag for a single image, but the effort is worth it. Captioning benefits many more people than just those with hearing impairments. Persons for whom English is a second language, persons with learning disabilities, and anyone who has trouble following interactions are helped. Finally, the audio quality of some recordings is less than what might be hoped for, and in such instances, captioning aids in interpretation.

2. Don't Rely on Color Alone To Convey Information

The key design point here is to make text and background contrast and not of a similar hue. A corollary to this is to avoid using images as background for your page. Even faint watermarks add little to the page design other than clutter and increased download time. Finally, information should not be conveyed using color. For example, some fields on forms may be required. Do not designate these fields using color alone (an asterisk works just as well) because color can render differently on different monitors and, of course, is useless to persons with color blindness. The WAI advises checking your page by photocopying it several times. Can you still identify the required fields?

3. Use Markup & Cascading Style Sheets Properly

There are several HTML (hypertext markup language) codes that format the text in certain ways, but these should not be used as formatting shortcuts. For example, authors can use headings to increase font size and boldness, but if a reader is using specialized software that helps organize the page, headings used for formatting can become confusing. Style sheets are becoming more common as a method of identifying formatting, but they are not readable by early browsers. Consequently, make sure the page will still display properly if the style sheet is turned off.

4. *Clarify Natural Language*

To persons just beginning to develop Web pages, the question might be asked, "What is natural language?" The answer is the languages of humans: English, Chinese, French, etc. You should identify the predominant natural language for the entire document by changing the <html> tag at the beginning of the document to <html lang="en"> (if English is the language, of course), and then note any language changes in the document, when they occur. For instructions specific to several types of Web authoring tools, see the Web Accessibility in Mind Web site (WebAIM; http://www.Webaim.org/howto/). Identifying the natural language allows screen and Braille readers to set themselves to use a given language and also helps search engines find pages being sought and generally improves page readability.

5. *Identify by Column and Row Headers and/or Summarize Contents of Tables.*

Tables have two uses on the Web: to convey data and for layout. The use of tables for data is commonplace, but in terms of accessibility, several cautions are in order. For data tables to be accessible, the column and row headers need to be identified. This can be accomplished by adding a "header" tag and an "id" for each header cell. Fortunately, this can be accomplished easily with the major Web authoring tools such as Dreamweaver or FrontPage. Labeling a cell as a header cell will center it and make the text bold. We need to add, however, that creating tables that can be read with older screen readers is tedious and probably not worth it, even for very simple tables. We suggest summarizing the table instead, similar to our advice about graphs. A table summary not only makes the information in the table available to all, it ensures that important points are identified. Fortunately, new versions of the screen readers have the ability to identify the row and column header associated with any cell, making tables accessible to those who have the software. Even more than failure to include alt-tags on images, using tables for layout is one of the most common guidelines violated. Early screen readers read table data not cell-by-cell, but line-by-line, as though the text was not in a table but merely printed across the page, which was impossible to comprehend. Current versions of JAWS and HomePage Reader (the software mentioned above) read tables cell-by-cell, vastly improving readability. Nevertheless, for tables to render properly, the cells should make sense when read across the page, "linearized," and read in order.

6. *Ensure That Pages Using New Technology Transform Gracefully*
Transforming gracefully means "still readable." New technologies include Java applets and ActiveX scripts. The WAI gives a rather mixed message on this guideline. On the one hand, the WAI wants authors to use new technologies, but on the other hand it recommends making the pages backward compatible. These scripts can perform a multitude of tasks (e.g., dropdown menus), but they are not viewable on PDAs, text-based browsers, or older browser versions. Consequently, authors are often left with the need for a separate page that is compatible with the older version.

7. *Give Users Control of Time Sensitive Content Changes*
Time sensitive content is content that appears only for a short amount of time or that starts by itself, without input from the user. It is always good Web page design to let users control what they see and when they see it (Pearrow, 2000). Many of us read Web pages slowly or scan for certain features. Starting animations when bandwidth is limited may cause a computer to crash and jingles that repeat endlessly can be annoying. Moreover, some persons with epilepsy find frequencies between 4 and 59 flashes per second can cause seizures.

When Web pages move to new servers or have been renamed, it is helpful to provide a link to the new page, but allow your viewer the option of when to click the link. They then have time to reset their bookmarks and favorites to the new page.

8. *Ensure Accessibility of Embedded User Interfaces*
Like any specialty, Web design has its own vocabulary. Embedded user interfaces with such things as scripts (e.g., Java scripts). This guideline means that if you use scripts to perform a task (drop down menus, for example), be sure to have an alternative (a site map or text only menu).

9. *Design for Device Independence*
This requirement is becoming increasingly important as nontraditional devices such as PDAs and wireless telephones become more common.

For example, as of the writing of this chapter, there was no browser for the Palm operating system, although pages can be viewed on Palm compatible devices, but these pages have neither graphics nor can they run scripts. As different types of devices become more common, this guideline will become increasingly important.

10. Use Interim Solutions

The essence of this guideline is that you need to provide backward compatibility with older browsers. Although not explicit in the title, this guideline addresses problems caused by adding new technologies without giving the user control. A perfect example is the pop-up window. Such windows can be just an inconvenience for most of us, but for a person using a screen reader, it can be very confusing. If there are several copies of the browser open, finding out where you are can be a distinct problem if you cannot see the screen. There are times, however, when it is advantageous to open a new window. If you need to open a new window, inform the user that this will happen. It is also useful to explain how to return to where they began. Adding the parenthetical phrase after the link "Opens new window. Close the window to return to this page" helps eliminate confusion.

11. Use the World Wide Web Consortium (W3C) Technology and Guidelines

The W3C is the group that sets standards and guidelines for developing content for the Internet (http://www.w3.org/), and the WAI is part of the W3C. The W3C tries to incorporate assistive technology into its innovations. If you cannot use W3C technology, then an alternative version should be available (usually a text only page), but remember to update this page whenever the main page is updated.

12. Provide Content and Orientation Information

This guideline is another example of how accessibility has as its core good Web design. This guideline and Guideline 13 help all readers. Essentially, provide organization to your page that makes reading and finding information easy. One simple concept to remember is to title every page at your site. If you use frames, be sure each has a meaningful title and provide an overview of how they link together. We like to include a "Help for screen readers" link at the top of our home page. This link goes to a text page that gives some general information about the site and how it is organized.

13. Give Clear Navigation Mechanisms

Navigation mechanisms include: navigation bars (links to the most important parts of a page), site maps (a global view of page or site organization), and tables of contents (lists and links to the most important sections of a site or a page). A common mistake that many designers make is using "click here" as a link. Many people scan a Web page quickly for links. When scanning, links that clearly define where they go are much more helpful. Moreover, screen readers have the ability to list all the links for quick navigation. Obviously, a list composed of phrases like "click here," "here," and the like, is useless. Vincent Flanders describes navigation that provides little information as "mystery meat navigation" (Flanders & Peters, 2002). Don't let this happen to you.

14. Make Documents Clear & Simple

This guideline is probably the most useful and probably should be guideline number 1. If you follow this guideline, many of the others will fall into place naturally. This seems simple but is probably deceptively so. Some suggestions include using headings to help readers organize the page, keeping links clear and concise, checking the reading level of your page using your word processor, and generally applying all the guidelines listed above.

Although some of the WAI's guidelines may seem esoteric, we iterate that they are the basis of basic, good Web page design. Providing contrast between text and background, providing alternative text for images, making links clear and concise, and avoiding the latest "gee-whiz" products are examples that all Web page designers should follow. And all are simple to implement. Thus, the WAI guidelines prove once again that "Accessibility is for everyone."

Validation: Is My Web Site Accessible?

Although not one of the guidelines from WAI per se, we suggest that Web authors take advantage of several free validation tools. These tools can automatically check your pages for accessibility, but they only do half (or less) of the job – they cannot replace a human checking the content. We recommend two validation programs in particular:

Bobby, from the Center for Applied Special Technology (http://www.cast.org), and *A-Prompt* from the University of Toronto's Adaptive Technology Resource Centre (ATRC) and the TRACE Center at the University of Wisconsin (http://aprompt.snow.utoronto.ca/). Although both these validation tools use the WAI and the W3C guidelines as the basis for their verification and can also check for Section 508 compliance, they work slightly differently.

- *Bobby* (http://www.cast.org/bobby) can either be downloaded for a fee (if you wish to check a whole Web site or multiple pages quickly), or a Web address can be typed directly into the *Bobby* Web page and analyzed on the Web. The latter method is free and is especially useful if you have only one page to check. The output from *Bobby* identifies the error and refers you to the WAI guidelines with information about how to repair the problem and the rationale for the repair. Repair will often require some knowledge of HTML or at least familiarity with a Web page authoring tool.
- *A-Prompt* (http://aprompt.snow.utoronto.ca/) currently cannot be run from the Internet but must be downloaded (for free) to your computer and then each page can be analyzed. *A-Prompt* has the distinct advantage of not only identifying the error, but also taking the user through tools designed to fix it. This is extremely helpful to newer Web page authors.

Both tools rely on human checks of content to identify items that cannot be verified by the computer. Thus, familiarity with the WAI Guidelines is necessary. Fortunately, a good method of learning the guidelines is to check several of your Web pages and follow the instructions from *Bobby* or *A-Prompt*. Thus, using these tools increases your knowledge of accessibility, HTML coding, and good Web page design.

"Changing" The User

We recognize that "changing" the user, in the sense of returning vision to someone who is blind or giving fine motor dexterity to someone who has athetoid cerebral palsy, is impossible. What we mean instead is changing the user's *knowledge* of the Web site. We advocate providing information to the user through specially designed help pages and links within your page. One method of doing this is by providing a link to a "Help for Persons Using Screen Readers" file. Such a file would contain information about the layout of the site and information about specific pages, if needed. Such a page would typically be linked from the home page, but could be linked from other pages if the need arose.

On individual pages, such an information section could be created at the bottom of the page so that multiple "Help" pages would not be necessary and to facilitate the updating of the information. (One method of making a site accessible is to have alternative, text-only pages that contain all the information as the home page but with the graphics. The obvious problem is synchronizing both pages.) In both instances Thatcher, Bohman, Burks, Henry, Regan, Swierenga, Urban, and Waddell (2002) describe a way to create a link to the text-only pages by using a transparent 1-by-1 pixel image (a GIF file). This image can be placed at the top of the page as a link to the help for screen readers' file. Because the image is transparent, it will not be seen by persons with vision, so the look of the page is unchanged. For persons with screen readers, however, the image is read as the link, and they can easily go to additional information or move about the Web page.

Resources

Validation Tools

Previously we discussed the validation tools *Bobby* (http://www.cast.org/bobby) and *A-Prompt* (http://aprompt.snow.utoronto.ca/). We add them here for completeness of this list, and again recommend them not only to identify accessibility problems but also as an informal tutorial on accessibility and Web page design. We have chosen to highlight these two programs because they are free. There are, however, several commercial products that may be of interest to organizations. These commercial products can help make the corrections.

Bobby (http://www.cast.org/bobby)
Will check your pages once they are posted to the Web. It will compare your pages to both the WAI and Section 508 guidelines. The Bobby Web site will ask you for your Web page address, automatically check the page for accessibility problems, and then link you to solutions from the WAI or Section 508. It will not, however, be able to check pages that are password protected. Some HTML knowledge is required.

A-Prompt (http://aprompt.snow.utoronto.ca/)
Will validate your page and provide menus with solutions. Download *A-Prompt* from the University of Toronto then run it on pages that are saved on your computer. Because the pages are saved "locally" *A-Prompt* can check your password protected pages before you post them to the Web. Much less knowledge of HTML is required, although HTML knowledge

is helpful for some repairs. *A-Prompt* finds both WAI and Section 508 errors.

Internet Resources

The Web Accessibility Initiative (WAI; www.w3c.org/wai). Provides detailed guidelines for creating accessible Web pages. Knowledge of HTML is required.

WebAIM (Web Accessibility in Mind; http://www.Webaim.org). Perhaps the best site for tutorials and free information about creating accessible Web pages. They frequently conduct free, on-line training sessions.

Books

Flanders, V., & Peters, D. (2002). *Son of Web pages that suck.* San Francisco: Sybex.

A great book for learning about Web page design by examining bad Web page design. Humorous but highly informative, although it is not about accessibility, per se.

Paciello, M. G. (2000). *Web accessibility for people with disabilities.* Lawrence, KA:CMP Books.

Easy to read and comprehensive. Paciello's book covers the basics from the legal background, through the WAI guidelines, to discussion of Java accessibility programs. It has a good section on disability resources and links to useful software.

Thatcher, J., Bohman, P., Burks, M., Henry, S. L., Regan, B., Swierenga, S., Urban, .D., & Waddell, C. D. (2002). *Constructing accessible Web sites.* Birmingham, UK:Glasshaus.

The credentials of the authors are impressive and this book provides specific suggestions for creating accessible Web pages. This book is more technical than Paciello's but is still easy to understand. It also addresses Section 508 in depth, and contains a new section on Multimedia's Flash MX program. Flash is becoming increasingly popular as a Web authoring tool. They also include a chapter on separating content for presentation.

Additional Resources

Editor's Note: One Web page meeting the criteria mentioned herein is the author's own (http://www.coe.ohio-state.edu/jwheaton).

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Center for Applied Special Technology (1999). Bobby (version 3.1.1). Retrieved June 12, 2000, from http://www.cast.org/bobby

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Paciello, M. G. (2000). *Web accessibility for people with disabilities.* Lawrence, KA: CMP Books.

Thatcher, J., Bohman, P., Burks, M., Henry, S. L., Regan, B., Swierenga, S., Urban, M. D., & Waddell, C. D. (2002). *Constructing accessible Web sites.* Birmingham, UK: Glasshaus.

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Chapter Two

Counselor Preparation For a Cyber World: Curriculum Design and Development

Diane Coursol and Jacqueline Lewis

Abstract

The purpose of this chapter is to describe the development and implementation of a course in technology in counselor education. The main goal of the course was to provide students with an overview of the use and application of technology in counseling and related fields. The four objectives of the course were to (a) provide an introduction to the use and application of hardware and software solutions; (b) afford opportunities for hands-on experience with technology; (c) provide an arena for students to demonstrate their technology skills and (d) to enhance technology skills and knowledge in a variety of counseling specialization areas. The chapter details syllabus development, topics covered, assignments, technology requirements for implementing the course and pedagogical implications. The chapter also highlights the application of the various emerging technologies such as video conferencing, digital media development, and e-learning instructional tools for the counseling profession.

Counselor Preparation For a Cyber World: Curriculum Design and Development

The growing interface between technology and service delivery is now widely acknowledged by the counseling profession (Bowman & Bowman, 1998; Bluhm & Kishner, 1988; Guterman & Kirk, 1999; Johnson & Sampson, 1985; Lambert, 1988; Lewis, Coursol, Khan & Wilson, 2001; Myrick & Sabella, 1995; Sampson, Kolodinsky & Greeno, 1997). Information technologies are employed for the purpose of information dissemination (Stevens & Lundberg, 1998; Thompson, 1999; Bowman & Bowman, 1998; Jerome, DeLeon, James, Folen, Earles & Gedney, 2000), cybercounseling (Bloom, 1998, Haas, 2000; Lee, 2000, Manhal-Baugus, 2001, Sussman, 2000), cybersupervision (Coursol & Lewis, 2000; Myrick & Sabella, 1995, Neukrug, 1991, Sampson, et al., 1997), group work (Bowman & Bowman, 1998), and on-line counselor education (Altekruse

& Brew, 2000, Peterson, 2000, Slencak, 2000). Today the Internet has made opportunities for the professional development of counselors more readily available and is a popular conduit for disseminating counseling related information to the public (Guterman & Kirk, 1999).

The American Counseling Association (ACA) and the National Board for Certified Counselors (NBCC) both envision that with the increased comfort with technology among the general population, cybercounseling is likely to become an emerging area for the profession (Bloom, 1997; Lee, 1998). Proactively, these bodies have established ethical standards for the practice of cybercounseling.

The pervasiveness of technology in counseling and related fields is only likely to increase in the future. As it continues to evolve to higher levels of sophistication, the availability of more versatile technologies will allow for greater application of technology to counseling, human services and related fields.

While it is also important that professionals are aware of the power of technology to expand services to certain groups (Jerome et al., 2000; Sampson, et al., 1997; Sussman, 2000; Stamm, 1998), they also need to recognize the challenges associated with it. Some of the more commonly cited concerns are the ambiguity of mental health related information available on the Internet including information about counselors and their areas of expertise (Bowman & Bowman, 1998; Jerome et al., 2000; Manhal-Baugus, 2001; Sampson, et al., 1997), access (Lee, 2000), counselor licensure (Manhal-Baugus, 2001), confidentiality (Attridge, 2000; Bloom, 1997; Bowman & Bowman, 1998; Haas, 2000; Jerome et al., 2000; Sussman, 2000), security (Bowman & Bowman, 1998; Jerome et al., 2000), and informed consent (Attridge, 2000; Bowman & Bowman, 1998; Jerome et al., 2000).

In the context of an information age it is imperative that counselor education students have the ability to use technology efficiently and appropriately (Casey, 2000; Myers & Gibson, 2000). Guterman & Kirk (1999) suggest that it is essential for counselor education students to acquire competence with technology such as the Internet, so that they are prepared to serve a client base that is comfortable with technology.

However, not all counseling professionals acquire the ability to apply technology effectively. Myers & Gibson (2000) suggest that students in counseling preparation programs do not possess well-developed technology skills. Proactively, some professional bodies including the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) and the Association for Counselor Education and Supervision (ACES) have addressed the need for technological competence for counselors and counselor education students by identifying the technology competencies that can be infused into the graduate curriculum. In 1999, ACES identified twelve technology competencies for counselors that range from basic skills such as the use of video recorders to more advanced applications such as the creation of web pages. Therefore, it is necessary to increase the level of technological proficiency among counseling professionals and especially among students in counselor education programs.

It also appears that students in counselor education programs see the value of and are interested in developing technological competencies. Lewis, et al. (2001) found that graduate students recognized the need to acquire proficiency in basic technology skills. This willingness to acquire the skills to use technology is perhaps reflective of the pervasiveness of and growing societal comfort with technology (Lewis, Coursol & Wahl, 2001).

One way to integrate technology into the counselor education curriculum is to offer a course in technology designed specifically for students in counseling and related fields. Such a course can be customized to meet the specific needs of novice professionals and introduce them to the application and ethical issues associated with the utilization of technology. If counselor education students are introduced to technology during their graduate preparation, they can learn to recognize and harness its potential, become aware of the judicious use of technology, and be more knowledgeable of its benefits and shortcomings.

The purpose of this chapter is to describe a technology course that was developed specifically for counselor education students. The chapter details syllabus development, assignments, technological requirements for implementing the course, and pedagogical considerations. It also highlights the application of the various emerging technologies such as video conferencing, digital video development, and e-learning instructional tools for the counseling profession. The chapter offers suggestions for designing a "technology in counseling" course and provides examples of course assignments and student projects.

Course Design and Development

Purpose of the Course

The "technology in counseling" course was initially developed in summer 2001 for graduate students in a counselor education program. The first time the course was offered it was scheduled for one week at 7.5 hours per day and one Saturday for eight hours, for a total of 45 contact hours. The second time the course was offered for a four-week session, three days a week, over the course of a summer semester. Currently, all students in the counselor education program have the option to take the course as a three-credit hour elective.

The primary goal of the course was to provide students with an overview of the use and application of technology in counseling and related fields. The four objectives of the course included (a) the introduction to the use and application of hardware and software solutions; (b) hands-on experience with technology; (c) opportunities for students to demonstrate their technology skills; and (d) the enhancement of student technology skills and knowledge in a variety of counseling specialization areas.

Syllabus Development

The design and the content of the course was guided by the technology skills and competencies identified in the literature. A key concern was to offer students the opportunity to apply technology and to ensure that they developed the skills to use it appropriately. Casey (2000) suggests that it is critical for counselor education students to develop the ability to use technology in an ethical manner.

The diversity of topics addressed in the syllabus ensured that students were introduced to a variety of technology applications in counseling. The course addressed a wide range of topics that were relevant to the specialization areas of each student. Accordingly, the course included the following topics:

- operating system management and basic trouble shooting strategies, use and application of technology resource tools (digital video projectors, scanners, digital cameras, digital camcorders, and web cameras);
- information and communication technology (navigating the Internet, e-mail, web resources);
- professional productivity tools (presentation software, word processing, spreadsheets, web development, researching online, assessment software, and scheduling and calendar software);
- multimedia technology enhancement tools (digital video, digital portfolio, and online resource access tools);
- applications of on-line instruction (distance education, virtual universities, and use and access in higher education);
- applications of technology for counselors (client documentation, diagnostic/treatment planning software, and cybercounseling); and

- ethical considerations of technology in counseling and student affairs.

The syllabus for the course listed five textbooks. One textbook was required and the other four were recommended as ancillary resources specific to students' specialization areas. The required text for the course was *Cybercounseling and Cyberlearning: Strategies for the Millennium* by Bloom and Walz (2000). This text was required because it provided the most comprehensive and current overview of the application of technology to counselor education. The four recommended texts included *New directions for student services, using technology to promote student learning: Opportunities for today and tomorrow* by Engstrom and Kruger (1997) that highlighted the application of technology in higher education settings, and the *Quick Guide to Using the Internet for Counseling* by Pachis, Rettmann and Gotthoffer (2001) was a basic reference for using the Internet. Additionally, the *Insiders Guide to Mental Health Resources Online* by Grohol (2001) served as a guide to search tools and online databases for students, and Tapscott's (1997) *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*, provided an introduction to interactive digital media and a discussion of the risks and benefits associated with implementing technology-based strategies in organizations.

Assignments for the Course

The philosophy guiding course assignments was to ensure that students had the opportunity to demonstrate the technology skills developed during the course. Assignments were also intended to provide students with opportunities to use their creativity and to develop tangible products that could assist them during the job search process and professionally in the future. Assignments were designed so students could demonstrate technology competencies identified by CACREP (2001) and ACES (1999). Assignments were scheduled throughout the course such that each one built upon skills that were developed in earlier assignments. The course included the following five assignments: the development and presentation of two topic areas utilizing multimedia presentation software; the development of an initial digital portfolio that students added to throughout the duration of their program, the establishment of an online class and facilitation of a threaded discussion, and two digital video projects.

The first assignment was to develop multimedia presentations using a commonly available presentation software product, Microsoft PowerPoint (2000). Each student had to undertake two individual presentations on two topics relevant to their specialization area. To facilitate the development of technology competencies, students were required to use multimedia equipment, provide Internet resources, hyperlink the resources within the PowerPoint presentations, upload handouts and the PowerPoint presentations to their online course and lead a threaded discussion with their peers about their presentation topics.

The digital portfolio project required students to develop a career-based portfolio. Students were provided with a handout outlining the purpose, objectives and content of career digital portfolios. This assignment also allowed students to demonstrate other technology skills such as scanning, the use of digital cameras and digital video cameras, and importing these products into their digital portfolio. As with the first assignment, this project provided additional experience with some of the more advanced features of presentation software including hyper-linking and integrating digital video and audio into the digital portfolio.

Scheduling presentations and digital portfolio assignments sequentially provided students with the opportunity to learn the fundamentals of the software package before applying it creatively and using more advanced functions. Through the completion of two multimedia classroom presentations students acquired competency, confidence and comfort with the presentation software. Since they were familiar with the basic elements of presentation software, students were more prepared to develop a career digital portfolio. Thus, they could focus on the purpose and design of the digital portfolio project rather than on learning the features of the software.

A third assignment involved the establishment of an online course using web-based course management tools. Students were required to set up an online course using Blackboard (2000) or Educator (1998) software. As part of the assignment, students had to upload the presentation handouts and the multimedia presentations they had created for the first assignment. The online course assignment served as a springboard for the fourth assignment in which students facilitated an online threaded discussion. As part of the fourth assignment students initiated and monitored a threaded discussion about the topic on which they presented in their first assignment.

The culminating assignment for the course was the development of a digital movie project. For this project, students were assigned to groups of two or three participants and developed a digital movie on a topic related to their interests and specialization area. Developing projects relevant to each student's specialization area can result in tangible products that can be used during practicum, internship and professionally. As part of the project, students were responsible for identifying a problem, brainstorming solutions, evaluating solutions, communicating their findings and reflecting upon their learning process through digital media. There was wide diversity in the kinds of topics around which students developed their digital movies. The topics included such areas as school violence, depression, grief and loss, diversity, and orientation to technology resources on a college campus.

Technology Requirements

The successful implementation of a technology course that has a strong experiential component is contingent upon student and instructor access to technology. The hardware that was necessary to conduct this course included computers, scanners, digital cameras, digital camcorders, digital projectors, server space, and Internet access. To ensure student access to technology, laptops, digital cameras, and digital camcorders could be checked out from the department for the duration of the course. The laptops were loaded with the necessary software so that students could work on their projects on their own time and were not limited to lab time availabilities. Server space was available on university computers as well as those provided through the Apple iTools (2002) website. Some of the software requirements included multimedia presentation software such as PowerPoint, web-based course management software such as Blackboard (2000) or Ucompass Educator (1998), web development software accessed through the Apple iTools (Apple, 2002), and digital movie software such as iMovie (Apple, 2001) and iPhoto (Apple, 2002).

Pedagogical Implications for Student Learning

The primary goal of this course was to allow students to develop technology competence and use it as a vehicle to facilitate problem solving and research, promote learning, and enhance communication. Basic sequential learning guidelines were followed to ensure that each project assignment built upon skills previously acquired in the course. The course was experiential in nature with each assignment involving inquiry-based learning and peer collaboration and instruction. The group and individual projects accommodated for the diverse specialization areas of the students and their different learning styles.

The capstone digital video assignment consolidated student learning acquired during the course. The nature of the assignment encouraged collaboration within and between groups, promoted peer instruction, enhanced critical thinking, inspired creativity, and fostered self-expression. A surprising outcome was that the assignment had the effect of motivating and exciting students about the application of technology in counselor education. It also created an environment where learning was fun and technology self-efficacy was facilitated, an effect particularly important given that some students possessed only basic technological competence such as word processing skills and could be described as techno-phobic. The assignment served as a motivational experience that transformed students formerly afraid of technology into individuals who had developed a newfound appreciation of the potential to apply technology in future endeavors.

Challenges

Several challenges were encountered during the development and implementation of the course. Some had been anticipated while others were recognized during the implementation phase. These challenges are discussed in relation to the broader areas of technology and class design.

A primary challenge was related to student use of and access to technology. The success of a "technology in counseling" course is contingent upon providing students with opportunities to learn through hands-on experience. However, not all students own the requisite hardware and software addressed during the course such as computers, scanners, digital cameras, digital camcorders and software. For this course, the students had access to the department-owned technology that they could check out for the duration of the course. This allowed students to work on projects outside of class and on their own timeline. An additional advantage of allowing students to check out the technology was that it provided them the opportunity to gain experience at their own pace under conditions in which they did not feel the pressure to perform at the level of their more technology-competent peers.

Another challenge is having technology support personnel available to maintain equipment. Tech support is crucial to ensure that the hardware and software is set-up and in proper working condition so that valuable class time is not spent trying to troubleshoot technical problems. While troubleshooting is part of the course curriculum, it is not something that is desirable to manage during every class period. Before the course begins, a proactive approach is to ensure that all technology is in proper working order and to identify the technology support available on-campus in the event of a problem.

In the area of class design one of the challenges was scheduling the course over a short period of time. When the course was first offered, it was scheduled for one week during the summer. This was found to be too short a time frame for the students to develop quality projects. To address this challenge, the instructor allowed the students extra time beyond the class schedule to complete their projects. Perhaps, if the course was scheduled during the regular semester over the course of 15 weeks or for a longer 4 week summer session, as was the case in 2002, time constraints may not be a challenge.

Differing technology skill levels between students in the class presented another course design challenge. Some students only demonstrated novice word processing skills while others had web page design expertise. Therefore, one challenge for the instructor was to effectively meet the needs of these two very diverse groups. A strategy was to provide students with wide latitude to develop their projects within the parameters of their skill level.

One benefit of the diversity in technology skill levels was that students with lower skill levels quickly realized that they could contribute to and participate in projects in a variety of ways. Through organizational skills, problem solving skills, and creativity they were able to contribute to the projects thus increasing their confidence and sense of competence. Through these assignments students learned that creating a technology product was not solely dependent upon their technology competence. In fact, they recognized that other higher order thinking processes such as creativity, vision, and project conceptualization played a vital role in the development of the final product.

Another class design challenge was the preparation required for the course. The time commitment, coordination and preparation for this type of experiential course is more than one might expect based on experience with traditional content-focused courses. Such preparation will ensure that lab equipment, servers, laptops, digital cameras and camcorders are available and in good working condition. Additionally, with technology evolving at such a rapid pace, the instructor may have to plan for and identify cutting-edge content areas where guest speakers may be appropriate. Some of these speakers are likely available within the university and local community. Lastly, given the experiential and tutorial nature of the course, it can be helpful for the instructor to plan ahead for those occasions when additional instructional support is necessary. This was particularly true during the class sessions that focused on digital video.

Lessons Learned: Recommendations for the Future

Since the initiation of the first course offering, several lessons have been learned about the planning, organization, and development of the course. Probably the most critical lesson was the need to plan in advance for technology acquisition prior to offering the course. Strategically, the department began to identify and purchase the necessary technology. Over time the department acquired laptops, digital cameras, digital camcorders, scanners, and a digital projector. Having departmental equipment ensured that students enrolled in the course had access to the necessary technology and could check out the equipment they required.

Departments may want to consider developing a set of protocols about student responsibility for the proper care and maintenance of the technology. Some of these protocols should address instances where equipment is either damaged or lost. It is also recommended that departments develop a strategy for managing some of the ancillary costs associated with the course. Accordingly, it is suggested that students purchase their own digital storage mediums such as digital film, CDs, and DVDs. This will ensure that the department does not incur unnecessary expenditures.

The department may also want to consider developing and maintaining a library of the various student digital projects that are created as part of the class. These projects can serve as resources for students in future classes. Tangible examples of projects in different specialization areas are available to students and can serve as a springboard for ideas for their projects.

A related lesson was to make sure that all the technology required for the course was available and ready for use prior to the commencement of the course. For students who may be techno-phobic, the experience of malfunctioning equipment may further support their negative beliefs about technology. In addition, the time required to attend to malfunctioning equipment or to upload software might consume valuable class time when students could have been working on projects.

After offering the course on two occasions several lessons about class development and design were also learned. A critical consideration at the outset of the course is to assess the level of technology competence among the students. It is not unusual to find that students enrolled in the course possess widely differing levels of technology skills. Having some knowledge of the skill level of the students is important for two reasons. First, it provides the instructor with an idea of the needs of the students in the class and the course adjustments that might be necessary. Additionally, the instructor can use the information to assign students to group projects. From an instructional perspective, it was found that assigning students of widely differing skill levels to project groups might make the experience less rewarding for all participants. When assigning students to group projects, it is recommended that students partner with others who possess relatively similar levels of competence. This will ensure that all students have the opportunity to develop the requisite skills and those with higher technology skill levels do not commandeer the projects.

The design of the course was experiential in nature and as a result was time intensive for both the instructor and students. As students learn the new technologies they often encounter difficulties with troubleshooting and project development that can place heavy demands on the instructor's time. If the course is team taught with another faculty member the time demands on a single instructor will be reduced. If this is not a possibility, the office of information technology on campus can serve as a valuable resource for support. In addition, the authors discovered that students who had previously taken the course and student interns from the instructional technology program were very helpful in providing individualized assistance.

Conclusion

All indicators suggest that technology will continue to grow at exponential rates in the future. It is therefore apparent that technological competence and proficiency has become necessary for counselors in an information age (Guterman & Kirk, 1999; Myers & Gibson, 2000). Additionally, there is a growing need for counselors to possess the knowledge and ability to use technology in an appropriate and ethical manner (Casey, 2000). Therefore, counselor education programs need to prepare graduates with the requisite knowledge and skills to ensure that technology benefits both clients and counselors. Offering a technology course for counselor education students allows the coursework to be tailored to the skill level of the students and to the needs of the field.

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Chapter Three

Multimedia in the Counselor Education Classroom: Transforming Learning with Video Technology

Michael L. Baltimore

The use of multimedia in the counselor education classroom grows daily. Technological advances have come in many forms including technology classrooms fitted with media projectors and Internet connections, counseling laboratories with video monitoring and recording equipment, computer-based training using CD-ROM in supplemental and primary ways, web-based publishing, and certainly, distance learning methodology. One exciting transformation has been the advent of video recording, editing, and production. Once a costly, complicated procedure left to a few production companies mostly in the television and movie industry, video production tools are now available to the home user and increasingly are standard equipment on new computers. Given this availability, even the average computer owner can now capture, edit, and produce high quality video. In fact, once thought of as only for videotape playback and television, video can now be delivered in many different formats including interactive CD-ROM and DVD and as streaming media on the Internet.

Interestingly, video technology and its widespread availability has use beyond common entertainment value and can be readily adapted to education (Budin, 1999; Escalada & Zollman, 1997; Rowley & Hart, 1996; Steffy, 1997). For example, many counselor educators regularly videotape counselor-in-training counseling sessions for supervision purposes and critique these videos to enhance learning. Counseling labs are equipped with video cameras and playback equipment for these purposes (Taylor, 1996). In addition, professional video training tapes are available that show counselors demonstrating various therapy processes and techniques. While commonly used in counselor education programs, the development and creation of video by counselor educators is not a common practice. Considering the increasingly available technology for this purpose and the need to infuse technology into training programs, video production now becomes a viable and important resource for counselor educators.

Using such technology can assist in the graduate level preparation of counseling students (Campbell, Lison, Borsook, Hoover, & Arnold, 1995) and can provide experiential activities that increase learning. In the new millennium CDs and DVDs are replacing the videotape as the media of choice for an ever-growing number of information technology professionals in education and training, corporate communications, visual and auditory archiving as well as entertainment publishing.

This chapter addresses video production as it relates to counselor education. Groundwork for infusing video production technology will be covered including the video production process, equipment, computer technology that assists in production, video editing, and final production. In addition, three important formats will be discussed. First is use of the produced video for streaming on the Internet. Simple procedures for embedding video in PowerPoint" slide presentations can be easily achieved. This process can be aimed at distance learning, website enhanced content, and other purposes. A second use for produced video is that of the interactive CD-ROM, a medium also becoming readily accessible, that allows for supplemental or stand-alone content for learning. Finally, a new and exciting format is that of the Digital Video Disc (DVD). A discussion of this editing and production process will show its applicability to teaching and training.

Video Technology and Counselor Educators

As this expansion continues, counselor educators must prepare themselves to make use of technology to enhance their teaching skill, the skill of their students, and the profession in general. Many examples of the use of computers, multimedia projectors, and the Internet supplemental to classroom activities (Forsyth, 1997; Goolkasian, 1996) have already transformed counselor education learning environments and will continue to do so in the future.

For example, a small but growing number of counselor educators has trained themselves in various technologies and implemented changes in the classroom by using video conferencing, CD-ROMs, listservs and web sites as adjunct instructional methods (Forsyth, 1997). However, the vast majority of counselor trainers has not kept pace with this infusion of technology and has relied on traditional means to deliver content.

Currently the use of video created for instructional purposes is limited but is becoming more commonplace (Hawkridge, 2001). For example, it is common practice for counselor educators to use home entertainment videos to demonstrate interpersonal situations relevant to counselor preparation. However, movie videos rarely demonstrate the precise skill needed to be showcased. It is important that counselor educators envision and then be able to address these training needs with specifically prepared, professional quality media.

New teaching/learning approaches for counselor educators are presented along with methods for developing and using content-based with available technology. In addition, the counselor education classroom and curriculum, it will be argued, can be transformed by the addition of enhanced experiential activities based on new technology (Hawkridge, 2001). The unconventional use of video using students, faculty and others combined with text-based content can become essential in this transformation. Information regarding the preparation and delivery of video-enhanced training is provided. The critical use of this content, including structured exercises, discussion, and assessment, also is outlined.

Using video in the counseling classroom is not new and adapting and expanding the use of video for teaching is a logical leap. In fact, students introduced to video/audio taping as a means of critiquing their counseling skills readily adapt to new ways of using video for training purposes. Instructors can initiate this new approach by bringing a video camera into the classroom.

Preparing an experiential activity can be an invigorating and exciting teaching opportunity. Using video "live" in the classroom enhances learning and can provide a "teachable moment". Further, given the need for counselor educators to build helping and relationship skills, this paradigm of captured video and various uses of video by current students documents the learning process and provides additional feedback for professional growth.

Creative uses of video can help students in a visual way that reinforces, quite distinctively, what verbal and self reports cannot. Conceiving activities for video use is not difficult. Many classroom activities used to discuss, describe, and explore issues in a counseling context can be recorded on video. Other activities can be set up that use video advantageously. For example, reflective exercises that give the trainee immediate and/or ongoing auditory and visual information can greatly enhance learning (Forsyth, 1997). To view one's self on video can be intimidating and even daunting at first, but should not be a reason not to use video as a learning resource. Experience has shown that the benefits outweigh issues of reluctance on the part of the participants.

Approaching students and other participants for videotaping is a similar issue faced by students and faculty as they begin the practicum experience. It appears that if the instructor, in this case, advances the notion that this is a "painless" and helpful means for learning, usually people are more willing to participate and reluctance diminishes shortly. Also, any student performance anxiety issues may give instructors an opportunity to help the person build confidence and demonstrate skill. These issues are related to "consent to tape" as with any informed consent procedure. Students in a class should be asked for their consent to tape and documentation of consent should be kept. Finally, it is important to address copyright and consent issues when videotaping. "Fair use" information is central to educators using videotape in the classroom (Brinson & Radcliff, 1996). While this chapter does not detail copyright and fair use concerns, those wanting to publish their video work on CD or DVD will want further consultation regarding content copyright. Most copyright issues pertaining to text or book publishing relate to or are, at least, similar to those using video.

Designing activities that utilize video in the classroom is a creative endeavor that challenges instructors. Almost any activity can be adapted and once on video, the instructor has the opportunity to use that video in several ways. First, playback of video for group or individual reflection is an option. Demonstrations of technique, self-improvement, and IPR (Interpersonal Process Recall) (Kagan, 1980) can be processed in the classroom or counseling session. However, other uses may also enhance the learning process. An instructor may wish to "show" the video in a different format such as streaming the video over the Internet, adding video to a PowerPoint, or creating a CD-ROM or DVD for distribution as is discussed latter in this chapter.

To conceptualize the possibilities and potential for multimedia in the classroom, it is necessary to address the logistical information that underlies the production and final result. For example, prior to actually shooting video, determining the purpose for the video, the audience and other issues will be introduced. Video production, including the use of professional camera techniques, editing video on computer, and the transfer of compressed video for streaming and CD or DVD production will also be discussed.

Creative use of video is within in the grasp of many counselor educators. It is hoped that the reader will be challenged to use video in the counseling classroom and to consider publishing video in new ways to enhance the professional development and growth of counseling students.

Video Development Process

This section presents various terms and processes for creating video for use in the counselor education classroom. While the discussion will include hardware and software necessary in the creation process, it is important to note that the counseling content is the focus. In other words, the message is most important. A counselor educator must have a thorough understanding of the topic area and then add a creative touch to the process (Walk, 1994). Once an idea has developed, production can begin.

To avoid the tendency to use technology for its own sake (Smith, 1997), the message (skill or training technique) should be enhanced by the technology. It is acceptable to explore the limits of technology in creating your project and it is advised to fully understand the capabilities of any technology that enhances your final result. Making an engaging and compelling project should be the key goal in developing your work. Several component areas will help in this process.

Planning your Project

Upon acquiring a new camera and computer capable of video editing it is tempting to begin without a plan, however there are benefits from considering the many issues that lead to the creation of a successful end product. First is the intended audience. What is the message the audience needs to take away from a viewing of the project? The cognitive behavioral technique that instructs one to use visualization and to project to the end of a situation is helpful here. As the audience (classroom participants) is leaving, what message did they take with them? What are the vital information points to be considered? And for counselors, how will this help with clients?

When considering the end message or technique, plan to develop content that clearly presents the material. If, for example, you want to the audience to learn a technique from a theory used in counseling, then a demonstration might be in order. Students often talk about "seeing" the technique demonstrated as a learning need. Your project might be designed to incorporate a clear demonstration and follow-up learning questions.

Determining Purpose

Once the audience has been identified and the message determined, then consider purpose. "What do I hope to accomplish from this presentation?" During this phase of planning knowledge of the content area is vital. For many counseling professionals, knowledge of content is already in place from prior teaching experience and research. Asking questions about how best to present counselor education content can lead to new activities and creative ways to present materials in video format.

In addition, determining a purpose for using video may lead authors toward publication of the video, with the final product containing examples of techniques, demonstrations, and other types of content. Since in most cases the purpose will be focused on learning, the component rubric or learning goals of a counseling skill or technique should be used. There is a difference between showing a technique and applying a technique as the latter requires much more practice and experience.

Counselor educators also might consider how one can test the results of learning derived from the video presentation and demonstration. While testing by examination is an option, others might consider having students demonstrate their newly acquired skills on videotape.

One final video production consideration is the possibility of publishing the work for broader audiences. Many large publication houses are now considering distributing video-based work on CD-ROM and DVD in a similar manner to text-based material. The purpose can be multi-faceted by design, thus giving the author the option to make proposals for general publication. Here, it will be necessary to research and consider sources of content, become aware of previously published work, and develop new questions regarding delivering ideas on video to your audience. An author must consider developing his or her own materials for publication beyond the classroom. Fair Use laws can allow the author to use materials for classroom purposes that would otherwise be prohibitive when publishing on a large scale. Further research is needed as the discussion of copyright and fair use issues is beyond the scope of this chapter.

Time, Budget, and Schedule

Three considerations must be included in the planning of a video project for counseling professionals. The length of time of the project is an important consideration. Hollywood movie producers often take months or years to pre-plan one two-hour production. While counselor educators may not have this amount of time, a well-planned project with time considerations will effectively shorten the time frame and help organize a multifaceted project.

Budget considerations should include hardware and software cost and availability. Universities usually have staff that can provide equipment and technical assistance for beginning and completing video projects. Interestingly, many new films are emerging from independent filmmakers that do quite well against the typical Hollywood blockbuster movies. In turn, local videographers can be hired to assist in video making and may be within the budget range of small productions. Grants and other assistance may help defray production and distribution costs.

Another consideration of good video production is scheduling. Time constraints can effectively postpone various aspects of production when principle characters and even equipment and locations are inaccessible. It is wise to consider these three aspects of production when you start building a project. Building a production schedule and allotting time for various aspects of the video work, editing, and post-production is essential in maintaining a working environment.

Video Hardware, Format and Technique

As video cameras have decreased in price, video making is becoming more feasible. The most popular of the newer video cameras is the digital video camera. Digital video uses an internal processor microchip that provides three times the quantity of pixels (the basic unit of electronic composition) of analog cameras. Thus, the resulting picture is much improved. The sophistication of the equipment also has increased, yet most video cameras have simple to use interfaces with features like zoom, auto focus, built-in VCR, and numerous special effects. However, despite these advances, in the hands of a novice camera owner, visual quality and professionalism can suffer. Becoming familiar with even a few essential camera techniques can have a tremendous effect on the final production.

Videography is the art of creating video with the use of professional techniques. It is beyond the scope of this chapter to cover all videography principles. Good camera work is essential for a quality product. As well, proper lighting and sound are the key ingredients for good video.

Many learned consumers, now "pro-sumers", are demanding higher quality video and the camera industry is continuing to meet this demand. Depending on level of sophistication, cameras range in price from a few hundred to thousands of dollars with beginner quality digital cameras at $700-$1200.

Hardware and Video Formats

Choosing a camera for video production can be overwhelming. There are several video formats to choose as one starts the process of purchasing, installing, and becoming familiar with video production. A digital video camera (DV) is the highest quality camera available for consumers and offers over 400 lines of resolution. This type of camera has little noticeable loss in quality and most of these cameras have a digital connector called IEEE 1394 or firewire. Firewire, so designated from the Macintosh computer, is capable of high-speed transfer of data from camera to computer.

Other camera formats include Digital 8, Hi-8, Standard 8, VHS and S-VHS. 8mm tape is an industry standard for consumers. This format allows for both analog and digital versions. Digital 8 provides good quality. VHS tape is an analog version, but is still popular. But due to size and resolution quality, the smaller, higher quality digital cameras are now replacing the

VHS cameras. S-VHS cameras offer more lines of resolution (between analog [240] and digital [420+]) yet are expensive and can only be played back in S-VHS VCRs.

Once a camera is chosen, the next concern is quality audio. Wireless microphones are becoming more popular and can easily be adapted for use with video camcorders. Importantly, sound becomes an essential ingredient in the final product. Testing of sound recording equipment must be done prior to recording. Nothing is worse than recording an entire session or demonstration and finding that no sound was recorded with the video. This testing should become a regular procedure before recording.

Also, accessories are an important consideration. Wide-angle lenses may be one accessory that will help with large group situations and for small areas that need a close shot. The better quality lenses will result in better video quality. As with still cameras, lenses and accessories such as filters that improve quality should be considered.

The next most important accessory is lighting. Quality lighting, not just available lighting such as ceiling lights, will improve the resulting video. Professional videographers use 3-position lighting consisting of left and right "key" lights and a background light. As most television interviews show, the background is usually lit separately from the foreground. Also, effect lighting such as a colored light for the background is often used. In addition, a "hair" light is often used to highlight the subject's silhouette. For the beginning videographer, experimenting with lighting is recommended prior to actually recording video.

After camera selection, a video capture card for inputting video into the computer is necessary for digitizing video from the camera into files on the computer. A wide range of video capture cards is available. Many have "firewire" options or have composite (RCA) or S-VHS input and output connectors. Video cards are added to a computer as a component to the computer's motherboard. Once installed, a camera is simply connected to the input on the card. Many software packages will recognize the attached camera as the computer is booted and then become ready for recording the videotape onto the computer's hard drive. Video capture cards can be found anywhere computer hardware is sold and range in price from $50 to several thousand dollars. For the average user, capture cards in the $300 - $500 range is sufficient to capture and record high quality video into the computer.

Computer hardware should be fast and data storage must be large in order to process and store very large video data files from cameras. The average video stream from the camera into the computer is from 350 MB to 500 MB per second uncompressed. This can quickly fill a normal computer hard disk with just a few minutes of video. Hard disks in the 60 to 120 gig range at speeds starting at 7200 rpm are recommended. Video capture cards help reduce the size of an incoming video stream by using various compressions schemes.

Hardware selection and matching of video cards, computers, and cameras, as well as software is becoming easier for the consumer. It is imperative to investigate compatibility between hardware devices before pursuing video production.

Video Technique

Once these initial techniques are considered, a few other video methods become apparent. For example, the location of the shoot (many times this can be the counseling lab, group room, or classroom) should be chosen. Also working with subjects who are oftentimes students, colleagues, and other talent involves giving direction for the proper makeup of the shot. Positioning the "talent" for the best composition will result in a better and more pleasing scene. One only has to look at television and movies to see how conversations are often shot from an angle or over the shoulder of one participant. Thought given to composition of the scene and talent will provide a more pleasing scene for the viewer. While a full review of camera techniques and broadcast composition is beyond the scope of this chapter, it is hoped that the reader will research each of the listed concerns for producing a better video product.

Once video is recorded, many special effects can improve the product in "post-production" and render a complete video for viewing. Such video techniques as fading in and out from scene to scene, video transitions and other effects will be discussed in the next section.

Video Editing and Production

This section will focus on an exciting and recent development in video production: the video editing process. With the latest arrival of desktop publishing on home computers, video production has seen tremendous growth in the recent past. Video editing software and video capture boards, decreasing in price and increasing in power, have found their way to the home user's computer. Many computers sold today are capable of editing and producing by way of digital video, productions that in the past could only be accomplished in major studios with expensive equipment unaffordable by the average consumer. With today's hardware and software products, video can easily be imported and manipulated as well as sound and effects added, that make a final product, from a digital camera source, one of high quality.

Digitizing video is defined as capturing video from cameras in the form of computer files on the hard drive. A digital video file has the extension "AVI" in PC format and "MOV" in Macintosh format. These digitized video files can then be used in editing software to produce a final movie. In preparing a computer for video editing, several aspects should be considered in order to produce a movie.

Capturing files into a computer results in very large file sizes. A high capacity hard drive is needed for storage. Also, larger files such as these will require faster processors in order to play back the video at an appropriate frame rate. Frame rate is defined as the number of video frames per second for normal movement. Typically, this is 30 or 60 frames per second for most video. However, video designed for the Internet should be produced at a much lower frame rate, somewhere near 15 frames per second. Also, audio is contained in the file. Differing degrees of compression can then be applied to change the file size and quality of the video clip.

Video Editing Software

While there are many video editing software packages on the market, an overview of general editing techniques can be adopted from most. In our example, Adobe Premiere, used extensively throughout the video industry, will be used to illustrate the video editing process. Many of the software packages use a "timeline" approach to organizing video and audio for the final product. The video clips, containing audio, will be brought into the software's timeline from the file's directory and placed in an order decided on by the user. Once a complete "set" of video and audio files is imported into the software, the user can decide to trim individual clips and make decisions about the composition from one video clip to the next. In addition, transitions and effects can be added to enhance the product. These transitions allow the user to fade, cut, and use a specialized transition effect between video clips for an overall image impression. Video clips can be "stacked" on top of one another and special effects such as "picture-in-picture" and video moving across the screen in a times sequence is possible.

The software also offers the ability to "mix" audio for voiceovers and other audio effects such as fading in and out voice and music including the timing of sound events that coincide with the video events. Video and audio must match sequentially. For example, a visual of a person speaking must match the movement of lips as words are spoken. Most software manages this problem by "linking" the video and audio clips together. However, the user has control over this and can cut the audio out completely for music, narration or voiceover.

Premiere offers the user extensive controls over video production. While this chapter cannot provide a thorough training to Premiere, we will attempt to overview the process. To overview Adobe Premiere, settings for video capture and playback are necessary. The beginning user will initiate a "project" that contains files for the video and control settings for the codec (compress-decompressor settings) and rendering options. Once a project is defined, the user will begin to import or capture directly video and audio files as well as graphics and other digital files. The Premiere interface is quite robust and new users might feel overwhelmed by the number of options and settings. Importantly, naming and saving files often is a primary work protocol in this and with all computer projects. Customization will allow the user to feel more comfortable with projects within Premiere. After setup of the workspace and settings, capturing video files from the camera or VCR is the next step in the process. Recognition of a digital camcorder by the software on the computer is dependent on the video capture card referenced earlier in this chapter. Given the wide range and types of video camcorders, it is imperative that the video card "recognizes" the camera when connected. Often times, the camera must be turned on before turning on the computer. Most "firewire" cameras will be recognized at the initial boot process. In Adobe Premiere, the capture menu option will give a small window that displays the video much in the same way a side LCD panel displays the picture on many digital camcorders. This display allows the user to find the starting point for video capture. Also, device control (play, stop, pause, fast forward, re-wind) on the software can be set to control the camera playback, such that the camera can be operated from the computer and software. Once machine control is enabled, the user can simply control all functions from the software.

Whether capturing one file or "batch" capturing an entire tape, the software will automate the process and ask for the file location for storing the files. Files captured can be used immediately in a project or saved for later use. Once files are in the computer, video editing can begin.

Editing video is not a complex process given the sophistication of software packages on the current market. In fact, experience shows that novice users can quickly learn the process and complete a video project with good results. The editing process for Premiere and for most video editing software packages is based on a timeline approach. The timeline is a space for video and audio clips to reside giving the user options for rearranging, organizing, cutting and removing, and adding effects toward a final product. Simply put, the timeline is a graphic display of the organization of video and audio that can be played back at any time by the user. The control over timing, audio and any displayed graphic is at the user's command. Video, audio, graphics, titles, and other files can be "dragged and dropped" onto the timeline and shown. Determination of sequencing is again at the user's command. Changing or deleting the files from the timeline is the same drag and drop process.

Individual video and audio clips can be editing by determining "in" and "out" points. Suggestions for beginning and ending a video sequence can be gleaned from the user's experience, but usually will begin with a fade up from a basic black clip. One only has to watch professionally made movies and television to gather ideas for a project. Fading into and out of video and audio is achieved by points on the timeline that are graduated from a beginning point, usually zero, up to the 100%. With special effects like voiceover, the music background may be set at 20% to 50% while the voice is set for 100%. In addition, special effects like transitions - artistic changes between one clip and the next - are achieved by overlapping video clips on the timeline and using a software clip from within the program to gradually fade from one to the other. Again, many of these processes are achieved by dragging the desired effects, as with clips, to the timeline.

Titles for video overlay can be created within most video editing packages. Most have a separate or built-in program that allows the user to type in any title and change the size, font, location, etc. The advantage is that titles and any phrases can be placed over the top of video and controlled in the same manner as clips (e.g., fading in and out, adding shadow effects, etc.). Of course, more complicated compositions can be created, such as the use of transparencies or superimposing clips over each other, and "keying" out selected colors for other material to show through. These techniques can also be easily mastered with practice. The user should be encouraged that the software and hardware has developed tremendously over the past few years. Compatibility issues are becoming less of a concern and the ease of use has risen for most video editing packages.

Once a video production is completed, the user has many options for displaying the result. Many videographers record a "master" video of the final result for storage and for "dubbing" to other formats including VHS and back to digital tape. Essentially, the video is exported in any one of a number of formats. Formats include: video for web-based viewing, CD-ROM, and for the latest format, DVD.

HTML and Streaming Video for Web

Most graduate students in counseling today have Internet connections in their homes and certainly have it available on campus. This access, while at first seen as an e-mail and library research tool, has developed to include supplemental sources for faculty presentation and teaching of counseling-related information. Many counselor educators have made use of web creation software to incorporate their own websites into their teaching approach. Commonly, these programs allow for content such as text, lecture materials, handouts, tests, and other items, to be displayed on a website that students can access anytime. There are numerous advantages for both instructor and student of having a website that contains class materials. Obviously, streaming video can add to that counseling-related information.

Using video in HTML documents has developed in line with the expansion of Internet service. Many Internet Service Providers (ISPs) are capable of hosting sites where video can be streamed if processed in a correct format. A number of software and hardware products can process video files into "compressed" video for streaming. Given the constraints of data rates on individual computers and Internet connections, the display of video can be of high quality or of less quality in picture and sound. This section will quickly cover a few methods for streaming video. One familiar presentation software package, Microsoft's PowerPoint, in its latest version, has a product for adding video that will sequence slides with streamed video for the Internet.

Video for the Internet is less complicated and expensive than ever before. New tools for the compression and streaming of video have been created. The process is less cumbersome and such that the beginning user can realize the desired results. Preparation of video for streaming on a web server is a matter of file size and frames per second (fps) for display. The average computer can easily process video at a frame rate of 15 frames per second. This "average" fps is often used as one establishes settings for processing video into compressed video for the Internet. The two prominent streaming packages available are: Microsoft's Media Encoder and RealNetwork's Media Producer. Both of these, as with other products for producing ready to stream video, operate similarly. That is, video is imported into the product, prepared for compression, and a compressed video is created. Data rate, length of the video and size of the picture, all affect the resulting video file.

Microsoft's Media Encoder can quickly convert an AVI file into a compressed file at an acceptable frame rate ready for the Web. One important issue facing those wishing to add video to their web site is whether or not their ISP is equipped with a streaming server. The streaming server is a software package for servers that allow the video to processed during display from the server side and avoids the slower processing involved in having the end user download the entire video clip before it is displayed. Obviously, a streaming server has advantages over ISP's without the software. Still, the individual user can stream video without such a server, but has to be very aware of file size and frame rate. Video files over 1 meg in size can be very difficult to display if the end user's computer is an older model or the Internet connection is slow, such as with dial-up modems.

Importantly, and as an example, the Microsoft product remains free. A desktop user can download the media encoder and begin creating video files for the Internet in a short amount of time. The file formats for streaming video are many and one has to keep current with the latest versions. For example, Microsoft's Active Streaming Format (ASF) has been replaced with Windows Media Video (WMV) and Audio (WMA) along with newer versions of the encoders. References for downloading these encoders are included on the CD-ROM.

An exciting development for adding video to PowerPoint has been the addition of the PowerPoint Developer. Microsoft Producer is a free add-on for Microsoft PowerPointÆ version 2002. It helps in the process of capturing, synchronizing, and publishing audio, video, slides, and images. The Producer product helps create media presentations that are viewable on demand in a Web browser (Lichtenberg & Travis, 2002). As with a number of products in this category, the software has a "wizard" (a template for creating a new project) that leads the user through the process. This free product for PowerPoint 2002 users can synchronize slide display with video and voice. The end user can go forward or backwards during the presentation for more control of the content. In addition, the final presentation can be saved on the hard drive for later use, added to a CD-ROM, or saved to a server for streaming. Multiple frame rate (measured in kilobyte per second or kbps) can be chosen depending on the target audience and Internet speed.

Saving these files at the proper frame rate is essential to insure the end user has a comfortable visual experience with your content. Trial and error testing on several different computer systems may be in order before releasing the composition.

Using this medium for the counselor education classroom is apparent. Slide presentation is a common technological method in training and teaching. This additional technique will give the educator a versatile tool for use on the Internet and in supplemental ways for getting content to students. Narration and video demonstrations can effectively enhance the learning experience for students. Projects providing students with opportunities to become efficient in the use and creation of video for the Internet can be the first step in their development in the area of video technology for future professional growth. Creating video products for class instruction and Internet distribution is a task that can be easily accomplished given the current technology.

CD-ROM

Another technology that is becoming easier to use is the creation of interactive CD-ROMs. The paradigm of interactive CD-ROM creation has been slow to develop. Typically, the difficult and often times inaccessible training needed to take advantage of the products used for video creation has slowed this development. While a few new products have been developed for this purpose, there are several that continue to be used most often for CD development. Macromedia's Authorware and Director software are common creation tools. Another viable product is IndigoRose Corporation's AutoPlay Media Studio. These products use menu and command line instruction for constructing interactivity using the author's content on a CD. That is, content developed by the author is then imported into the software program and arranged in sequence. The interactivity is created through the use of action-connected links displayed to the user. The end user navigates through the content – viewing video, listening to audio, reading text, viewing graphics, etc. - and has control over the pace and type of content. The key ingredient in the effectiveness of the products is the interactivity.

The software is designed to resemble pages or chapters in a book or web pages on the Internet. This design allows authors to create and place subject matter in sequence and to link additional, supportive content for study to any content currently viewed by the end user. The development of content for CD-ROM use can also be specialized or adapted to topics. Authors can decide how CDs can be used to enhance learning. Many CDs have been created as supplements to texts that can add multimedia content. However, with the proliferation of creation software, stand-alone CD-ROMs that cover a topic area in depth are on the rise. Several CD-ROM development companies that will create tailor-made interactive CD-ROMs are now available on the Internet. These companies simply collect materials from the author and create an interactive CD to your specifications using their multimedia systems, an inexpensive method that should continue to grow in coming years.

Video for CD-ROM can be in any number of formats, but must be compressed for display. Typically, a streaming compression format, such as ASF, WMV Microsoft, RM (RealPlayer), or MOV (QuickTime) is used. However, the Moving Pictures Expert Group, a large organization of video experts, has developed compression/decompression schemes (codec) named after them, called MPEG. Two of these codecs are used extensively in video CD and DVD. MPEG-1, VHS quality is used for CD-ROM full screen video. MPEG-2 is used exclusively for DVD video production and is of significantly higher quality.

Another method of creating CD-ROM for multimedia use in the classroom is that of using the HTML format. Materials used to create web pages can easily be stored on a CD and accessed by the user's web browser. Using a web design software package, such as Macromedia's Dreamweaver or FrontPage, can be the first step in CD-ROM creation. Text, graphics, and streaming video can then be displayed through the browser and links to additional content pages easily accessed.

An advantage of CD-ROM use for teaching is that supplemental material can be created for the student to use outside the learning classroom. Material on a CD can be accessed as needed by the user. As video is added to CDs, classroom time used to view demonstrations can be eliminated and processing of content may improve. Finally, publishing of professional materials such as texts or other training materials continues to evolve from a text-based medium to a multimedia one. One online journal, the *Journal of Technology in Counseling*, advocates for multimedia content in professional publications. Large publishing houses are now accepting and inviting more multimedia content, such as interactive CD-ROMs, for publication.

DVD

An exciting and expanding multimedia area is that of the recordable DVD. The DVD industry is growing at a rapid rate. DVDs are replacing videotape as the medium of choice for video.

CD-ROM or DVD-ROM devices are standard peripherals packaged with virtually every multimedia PC sold today. There is a burgeoning market in software that ties optical media playback to Internet-based presentations. But, perhaps most importantly, stand-alone DVD/CD players are the fastest selling new format in the history of consumer media distribution. It is reasonable to expect that advanced versions of the DVD player will replace the VHS machine as the dominant force in content in the not-too-distant future. The introduction of affordable DVD-Video recorders accelerates this transition. In fact, DVD recorders have dropped dramatically in price in the past two years.

DVD is the next generation of digital disk technology (Taylor, 2001). The amount of information that can be stored on a DVD is 7 to 25 times the amount of information that can be stored on a CD. The physical structure of a DVD allows a laser light to read data from one of four basic types of DVDs. DVD 5, 9, 10 and 18 refers to the amount of information held either on single-sided disks or double-sided disks. Given the amount of information from a digital camera, the DVD is a perfect medium for holding large amounts of information. Even with this storage size, video still must be compressed. Compression of video streams is a matter of removing various pieces of data that is redundant and unnecessary for the viewer. This has led the video industry to develop the compression scheme for DVD. This compression codec is called MPEG 2. Thus, any video for use with a DVD must be in the MPEG-2 format. All software, made for DVD production, has this codec built in which gives the viewer full screen (720x480) and over 500 lines of resolution.

For the first time, the DVD disk allows the user to interact with the video and jump to the exact location of a scene at the touch of a button without having to wait for a tape to rewind. This interactivity gives control over navigation to the end user. An exciting part of DVD development has been the ability to search instantaneously for video content, yet another facet that is just becoming known. This is the DVD-ROM technology. DVD-ROM goes beyond the video interactivity and allows developers to put other types of material on the disk in the same interactive way. Text, graphics, searches, and other interactivity is available with DVD-ROM. In fact, DVD disks can become "hybrid" disks and can work in a set-top DVD player and work in computers that increase the level of interactivity. Another interesting facet of this development is that what is now commonplace, that is, CD-ROM writable technology, can be applied to DVD. The difference is the vast amounts of information that one can write to a DVD over a CD-ROM.

DVD Features

The interactivity of DVD design, particularly the DVD hybrid disk, gives the user more information and control over content. Hollywood produced DVDs often show multiple camera angles of the same scene, additional audio content, such as descriptions and explanations of scenes by the actors or producers, and choices for the viewer. This last feature is quite remarkable when considering the production value. Given a choice, the end user can choose between different endings and outcomes and move to a completely different scenario. Counselor educators might well think of counseling sessions and training counselors. An example of applying this technology might be a video showing several differing outcomes based on a counselor's intervention with clients. One can only imagine the affect of such a training medium. With multiple angle video, several shots of the same scene can be display at the same time. For techniques, you may show the procedure from the view of the participants, close up, or add a diagram or animation that describes the procedure from another, completely different, point of view. This capability is opening new ways to envision how training can be done.

Using the DVD capabilities can only enhance education. Content materials, video, text and more can be produced and called up by the instructor to present materials in a timely manner. Teachers may be free to teach using this medium. Also, there is no compromise of video quality and content. The educator or trainer can take the DVD and computer into a field experience and show broadcast quality video and audio to trainees at anytime. Training manuals become full motion video rather than a piece of paper.

Another fascinating feature that is possible with DVD is its multicultural applications. One DVD disk can be designed for 32 different countries and each country can see and understand the content from their own language. This is simply a remarkable capability. Developers and producers of DVD can market their product worldwide in the native language of the country.

One can also look at DVD as a library of content readily accessed on demand. Several different versions of the same content and large archives can be contained on the disk. This permits the viewer to access data that they choose, as they need it. In addition, the producer of a DVD product can allow the user an "inside" view of what they were thinking, the reasons behind a certain presentation, and give a more in depth view of the creative process. This one aspect alone will transform how we use video and how training will change in the coming years.

Video Production and DVD Authoring

There are a number of DVD authoring software packages available to the consumer. Many packages will "transcode" raw video footage into the proper MPEG-2 format. Hardware and software enhanced compression is available typically coming in as AVI uncompressed video for superior picture quality. Software is set up much like CD-ROM authoring software in that menus are created for the end user to select scenes and have a level of interactivity. Each video is divided into scenes and marked for selection. The menu gives an option for navigating directly to that scene. Usually, an option exists for playing the entire video from beginning to end as well.

In creating a DVD, the author must decide the layout, background, music, and scenes that will make up the DVD. Some authoring software packages, costing $50 or less, can quickly import video, convert into the file structure needed for DVD, and produce simple menus that look quite good. Other more expensive software packages range from several hundred dollars to several or more thousands, allowing the author to use "moving" menus (those with video in the background and small moving video buttons) and many other features not found on the less expensive versions. Again, the DVD authoring platform allows for full screen broadcast quality video and gives the user the ability to control viewing and content. Authors using software to create DVDs can begin to see the advantages for learning. For example, construction of a multilevel tutorial that stops at a certain point and goes to a quiz to test learning must be designed as the author creates the DVD. What questions are asked and what happens as the user answers, can be a function of how the author designed the product. Remediation for wrong or incomplete answers using a special section, which the user is sent on the DVD, will enhance the learning process and give the trainee another opportunity for learning. This branching ability in authoring enables the author to create levels of abstraction that connect with the trainee's learning styles, thus producing a more effective learning experience.

DVD Hardware

DVD players and DVD recorders have dropped substantially in price over the past few years. Many computers come equipped with DVD-ROM drives allowing DVDs to be played on the computer screen The DVD recorders are currently between $300 and $500 and come with authoring software in most cases. There is a compatibility issue for DVD created on some recorders. An author must test created DVDs on machines, including set top DVD players, to ensure there are no problems with reading the DVD. Many newer model players offer many format compatibilities so this has become less of a problem. The basic issue here is that manufacturers of DVD recorders market proprietary formats. The industry is working to overcome the multiple format problems. Still the author purchasing DVD recorders should research this issue prior to purchasing a unit in order to ensure a distributable product.

DVD media blank disks have also dropped in price. The typical DVD blank disk now sells in the $1 to $3 range and can go below $1 in price. This compares favorably to the less than $.50 price for blank CD-ROMs.

DVD Future

The future for DVD authoring looks bright. More computers are being sold with DVD drives, the software and hardware are becoming more accessible, and the potential for DVD authoring is coming closer into the hands of creative people. The medium will certainly enhance education and those educators who take advantage of video and DVD authoring will make significant contributions to the teaching and learning disciplines. One only has to look at local video rental stores to see the change occurring for DVD. The transition from VHS tape to digital DVD entertainment media is quite remarkable. The growth for educators, particularly counselor educators, is in the hands of those who will apply this technology to their teaching and training efforts. With a little training, the counseling field will reap tremendous benefits for students and colleagues alike.

The impact of the world of digital video and the world of computer interactivity is probably one of the most exciting combinations of technologies that have come about in a number of years. It is hoped that this technology will excite those in education toward being more creative and successful in their field.

Conclusions

Counselor educators can, within a reasonable budget, create, build, and produce high quality video products for use in the classroom and for advancing their professional development. Many online journals and publishing houses are seeking video and multimedia source material from counselors. It is highly likely that this trend toward the infusion of technology will continue (Liebowitz, 1997). According to Keane (2002) teaching in the classroom can only be positively assisted with the appropriate use of created video that is tailored to the needs of students. Counselor educators who take time to learn this technology, conceive of the learning potential, and create their own teaching content will help students in their technological advancement. Further, video technology and the various format options, including web, CD-ROM, and importantly, DVD, will continue to grow. Counselor educators have an opportunity to create content and distribute that content, helping the profession to grow. Lastly, taking advantage of this opportunity for professional and discipline growth can only result in advancing the helping profession's mission to help others.

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Chapter Four

Planning for CyberLearning: A Framework for Counselor Educators

Annette C. Albrecht and Dennis G. Jones

> Whether distance learning spells the end of traditional campuses, as some maintain, or whether distance learning instead represents a powerful addition to a growing array of delivery options for higher education, its impact on higher education is great and growing. Distance learning is creating alternative models of teaching and learning, new job descriptions for faculty, and new types of higher education providers. (Eaton, 2002, p. 3)

Clearly, "distance learning poses new challenges for educators" (Serwatka, 2002, p. 46). These challenges may run the gamut from issues related to tenure, issues related to quality, issues related to course design, issues related to testing, and a plethora of other challenges that will continue to emerge as distance learning becomes a more prevalent delivery system within institutions of higher education. Some of these challenges will be similar across academic disciplines, while other challenges will be unique only to the preparation of counselors-in-training. The focus of this chapter is to provide a conceptual framework for counselor educators to utilize in pragmatic planning for the effective development and delivery of online courses.

Need for Planning in an Online Environment

Critics of cyberlearning suggest that students cannot learn in an online environment. A full discussion of the effectiveness of distance learning is beyond the scope of this discussion. However, numerous studies have suggested that "no significant difference" exists in the quality of learning that occurs between distance learning and traditional learning environments (Russell, 1999). Thus, regardless of the delivery method (i.e., online, interactive television, face-to-face, etc.), it is our belief that planning is a key factor in creating high quality learning environments. Other authors have echoed the importance of planning. For example, Arends (1998) noted, "both theory and common sense suggest that planning for any kind of activity improves results. Research also favors instructional planning over undirected events and activities" (p. 90).

Additionally, in discussing the importance of planning in an online environment, Palloff and Pratt (2001) posited that:

> Nothing takes the place of good planning in the creation of any new academic endeavor. Some institutions have bypassed a planning process in the development of an online program ... However, as with the creation of a single course, planning with the end in mind can only serve to move the institution closer to a realistic use of technology to enhance teaching and learning. (p. 13)

It is our opinion that *planning is an essential component of developing a high quality online course.*

The issue of "quality" distance learning courses has been and will continue to be a concern for faculty and students, but it is also a concern for various accrediting organizations. Mehrotra, Hollister, and McGahey (2001) noted:

> Most colleges and universities in the United States are accredited by one of the country's eight regional accrediting commissions. In addition, specific programs within these institutions are accredited by national professional associations ... Both institutional accreditation and specialized accreditation are voluntary and have two fundamental purposes: quality assurance and institutional program improvement. (p. 195)

For example, "the eight regional accrediting organizations have adopted a common platform for review of distance learning" (Council for Higher Education Accreditation, 2002, p. 7). This platform is based on "a common statement of *Principles of Good Practice in Electronically Offered Academic Degree and Certificate Programs*" (Western Cooperative for Educational Telecommunications, n.d., p. 5).

In addition to the regional accrediting agencies, the 2001 standards of the Council for Accreditation of Counseling and Related Educational Programs (CACREP) stated:

> CACREP recognizes that alternative instruction methods (for example, distance learning) are currently used in many

counselor education programs. The following principles apply when evaluating these programs:

a. Programs that use alternative instruction methods will be evaluated with the same CACREP Standards for accreditation as programs that employ more traditional methods;
b. Accreditation for such programs will be based on their demonstrated compliance with CACREP standards; and
c. Programs that use alternative instruction methods are subject to the same level of review as programs that employ more traditional methods (CACREP, 2000).

In addition to accrediting agencies, professional counseling-related organizations have also developed guidelines concerning distance learning. For example, in May 1999, the Executive Council of the Association for Counselor Education and Supervision (ACES) endorsed a document entitled *ACES Guidelines for Online Instruction in Counselor Education.*

Collectively, the guidelines from regional accrediting organizations, the CACREP, and the ACES provide a basis for a strong foundation for a counselor preparation program when planning for cyberlearning. "Distributed [distance] education will be part of higher education's future. With careful planning, judicious choices, and resolute execution, that future will be a positive one for our institutions, as well as for those we serve" (Oblinger, Barone, & Hawkins, 2001, p. 29).

A Planning Framework for Cyberlearning

Many faculty members develop their teaching style based on the examples and "unexamples" they observed from colleagues as well as from professors during their graduate programs. Many faculty members have implemented certain instructional strategies based on their experiences as graduate students. However, many counselor educators have had limited experiences with cyberlearning as either an instructor or a student. Therefore, they possess no examples and unexamples when developing their own online courses.

The following planning framework has been developed to assist counselor educators to organize the various aspects of developing virtual learning environments for the preparation of counselors-in-training. Planning for cyberlearning occurs at three levels:

1. *Pre-Planning:* This level of planning provides a framework to evaluate the issues that a counselor educator needs to consider prior to deciding whether or not to become involved in cyberlearning.

2. *Course Planning:* This level of planning provides a framework for the steps involved in planning the entire cyberlearning experience (i.e., a full course).
3. *Lesson Planning:* This level of planning provides a framework for the steps involved in planning the individual components (i.e., lessons, units, topics, etc.) that comprise the entire cyberlearning experience.

The remaining pages of this chapter will discuss the three levels of this framework for planning for cyberlearning.

Pre-Planning

Unlike other academic disciplines such as business or English, counselor education has not been quick to embrace cyberlearning. Therefore, counselor educators have few models to serve as examples of how to develop online counseling-related courses. This lack of models as well as a corresponding lack of colleagues to look toward for mentoring makes the pre-planning process even more critical for counselor educators.

Ideally, the pre-planning process should begin at least 12 months prior to offering an online course. For each counselor educator, the issues to be addressed during this process will vary based on the individual as well as his or her academic institution. However, the following schedule delineates some of the issues that a counselor educator needs to consider *prior* to making a commitment to his or her institution to develop an online course.

1. *Belief about the Effectiveness of Cyberlearning:* Does the counselor educator believe that counselors-in-training can *never* learn in an online environment? If yes, then the planning process stops at this point. Online students are no different than students in face-to-face courses in that, if the faculty member does not believe in the learning process, the student has little chance of being successful.
2. *Faculty Incentives:* Many institutions recognize that the processes of developing and delivering online courses are much more time intensive than processes used in traditional face-to-face courses. According to Matthews (2002), "it takes an average of 18 hours of personal time to create one hour of stand-alone Web-based instruction" (p. 9). However, it is our experience that the amount of personal time involved by a faculty member depends on three primary factors: (a) the faculty member's experience in developing online courses (i.e., the second course will not take as long as the first course), (b) the amount of planning that was completed prior to developing the course (i.e., better planning will normally reduce

development time), and (c) the level of support and resources provided to the faculty by the institution (i.e., a greater number of institutional resources will usually mean a lower level of time commitment for the faculty member). For example, a faculty member with prior experience developing online courses that has spent quality time doing the necessary planning and works at an institution that provides high levels of support (e.g., course development support) should find that his or her personal time commitment will be considerably less then the opposite scenario (i.e., first time developer with limited planning, and limited institutional support). Even under the "best case" scenario, it will still take a counselor educator more time to develop and deliver an online course than delivery of the same course in a traditional classroom setting. Therefore, institutions need to find incentives to encourage faculty members to be willing to devote the extra time to developing and delivering online courses. Following is a list of incentives that may be available to faculty members.

a. *Role in Tenure and Promotion Processes:* Does online course development or delivery receive any type of special recognition in the tenure and promotion processes? For example, the Texas A&M University System (2000) has a policy (17.02.02) that includes a statement which would allow system institutions to recognize the development and delivery of online courses in the tenure and promotion processes.
b. *Faculty Training:* Does the institution provide training to help faculty members learn how to develop and deliver online courses? Schrum and Benson (2002) noted, "the strength of the faculty largely determines the success of any program, traditional or online, but in an online distance learning program, faculty development cannot be overemphasized" (p. 197).
c. *Course Development Support:* Does the institution provide support personnel (e.g., course developers) to assist the faculty member in developing the course? The type of support available to a faculty member varies greatly from institution to institution. According to Driscoll (2002), developing web-based courses "requires many team members with specialized skills. In some organizations people play more than one role" (p. 27). The roles that might be needed to support someone in the development of technology-based learning have been identified by Lee and Owens (2000). Our experiences suggest that of the roles identified by Lee and Owens, the following roles seem to be most common at institutions of higher

education which support faculty in the development of online courses:

- *Instructional Designer:* This person works with the faculty member to design the course. This will include determining if graphics, animations, audio, and video are going to be included in the course. If any of these media elements are going to be included, the instructional designer will work with the other members of the course development team to ensure that these elements are accurate and of high technical quality.
- *Graphic Designer:* This person will be essential if the course will include graphics or motion graphics (i.e., animations).
- *Audio Producer or Technician:* This person will be necessary if the course will include audio clips.
- *Video Producer and Video Editor or Technician:* This person will be integral if the course will include video clips (e.g., demonstrations).
- *Author:* For online courses, this person will normally be a web developer and will bring together the final versions of the various media elements (i.e., text, graphics, animations, audio, and video) into a web-enabled environment.

d. Course Delivery Support: Does the institution provide support personnel (e.g., a help desk, exam proctors) to assist the faculty member in delivery of the course? Many institutions provide a help desk to support students and faculty with technical problems. During an online course, it is inevitable that one or more students will experience technical difficulties accessing the web-based course materials. Therefore, a help desk is especially important if the counselor educator does not want to be the person to help students resolve their technical difficulties. One of the most difficult logistical issues that a faculty member needs to consider is the issue of testing. If the counselor educator believes that the student should complete pencil and paper-based examinations, then he or she needs to determine how to handle test administration to an online student. Many institutions have developed collaborative relationships with other institutions as well as community colleges for administering face-to-face pencil and paper-based examinations to online students. In a study of student performance in online courses, Marold, Larsen, and Moreno (2002) reported that the students "took their exams at the College Testing and Assessment Center, where the tests were monitored and a picture ID was required of each student" (p. 184).

e. *Other Incentives:* What additional incentives are available to a faculty member from his or her institution? Schifter (2000) investigated the prevalence of a number of incentives that might be available to faculty members for developing and delivering distance learning courses. Some of the incentives in Schifter's study included:
    - Computer equipment purchase
    - Graduate or Teaching Assistants
    - Internet Service Provider cost covered
    - National conference fees
    - Overload pay
    - Release time
    - Software purchase
    - Travel funds

3. *Intellectual Property:* What are the institution's policies concerning ownership of materials created for online courses? This is a "hot button" for many faculty members because of the concern that a faculty member's institution will take ownership of the course materials created by the faculty member. The National Education Association (2001) reported that "faculty were clearly more concerned about controlling how their intellectual property was used than the amount of money they might get for that property" (p.4). According to Tallman (2000):

> Copyright law provides, in general, that works created by employees within the scope of employment belong to the employer. That provision has particular relevance to the creation and delivery of online courses at a university. A university may claim that online courses are created within the scope of a faculty member's employment, and that, therefore the university owns them. There are reasonable grounds for a university to claim such ownership. There are also reasonable bases for faculty to claim ownership. It may be possible to avoid contention if the parties agree to own copyright of online courses jointly. (p. 212)

4. *Library Readiness:* Is the institution's library prepared to support the research needs of the online students? Coffman (2001) observed "it's not easy to walk over to the library after class when your university

is a thousand miles away. Unfortunately, however, advances in distance librarianship have not always kept pace with the rapid development in distance education" (p. 22).

5. *Readiness of Other Support Services:* Are other support services (e.g., financial aid, book store) prepared to respond to the needs of online students? Even though these services may not be directly related to the academic content, the quality and availability of these services have the potential to impact the learning experiences for online students. Buchanan (2002) noted:

   > Significant institutional structures, including such areas as registration, advising, library, and technical support are overlooked until too late. Institutions must have clear, well-planned strategies in place in order to maximize their students' learning experiences and overall satisfaction with distance education. (p. 141)

After considering these and other issues, the counselor educator should be able to decide whether or not he or she is willing to make a commitment to his or her institution to develop an online course. If the decision is yes, the counselor educator then needs to develop a timeline for preparing a course. The faculty member's distance learning staff may have a recommended timeline. If not, various authors (Albrecht & Jones, 2001; Smith, 1998) have suggested timelines for developing online courses. Two of the key components in the timeline should address course-level planning and lesson-level planning. The remainder of this chapter provides frameworks for these two planning activities.

Course Planning

Once the counselor educator has decided to further explore the opportunities of cyberlearning, the next major task involves selecting a course for conversion to online delivery. This decision may rest with the individual counselor educator or this could be a decision made by the counselor preparation faculty. After the course has been selected, the planning process needs to focus on issues related to the conversion of this specific course.

On many campuses, the first steps in course planning will involve initiating some type of paperwork through the department chair or the campus distance learning administrator. This paperwork often will provide the faculty member with institution-specific procedures and deadlines for developing the course, as well as the process for receiving various approvals. After the approvals are received, the course planning process can begin.

Various authors (e.g., Dick & Carey, 1996; Harris & Castillo, 2002; Shade 2000; Smith & Ragan, 1999) have suggested models for course planning. Each of these models possesses its own nuance, however collectively they contain "the following requisite elements:

1. Analysis of the Learning Environment
2. Establishment of Course Goals
3. Selection of Instructional Delivery System(s)
4. Methods of Student Assessment
5. Evaluation of the Learning Process" (Albrecht & Jones, 2001, p. 37)

The following discussion describes the possible use of this course planning model by a counselor educator in the development of an online course in the area of career development. The exact nature of career development-related courses will differ from institution to institution. Therefore, we have selected a more general description using the career development core area of the CACREP's (2000) document entitled *The 2001 Standards*. This description will provide the basis for applying the course planning model to an online course in the area of career development.

1. *Analysis of the Learning Environment:* This step in the course planning process concerns the background of the learner as well as the context in which the learning is going to occur. Lee and Owens (2000) identified nine types of analysis that should occur during this phase of the planning process. However, the following three types of analysis would have the most impact on the development of an online counseling-related course.
   - a. *Audience Analysis:* "Identify the background, learning characteristics, and prerequisite skills of the audience" (Lee & Owens, 2000, p. 14). The background factors could include gender, age, and native language (i.e., in an online course the student could reside anywhere in the world). The learning characteristics could include learning styles and preferences, as well as motivations related to the course. Finally, the prerequisite skills would focus on prior counseling-related courses, writing skills, and research abilities.
   - b. *Technology Analysis:* "Identify existing technology capabilities" (Lee & Owens, 2000, p. 14). This would include verifying the technological options available to the instructor for use in the course. For example, does the institution have the ability to provide real-time audio and video streaming over the Internet

to students? However, the more important component of this part of the analysis concerns assessing the technological capabilities of the instructor and the students. For example, do the students have experience in other online courses?

c. *Situational Analysis:* "Identify environmental or organizational constraints that may have an impact on goals and multimedia design" (Lee & Owens, 2000, p. 14). These factors could include a variety of issues, many of which the counselor educator will most likely have little power to control or influence. However, each of these issues will impact how the faculty member ultimately designs the course. For example, these constraints could include having an institutional policy that students cannot be required to attend a mandatory on-campus orientation at the beginning of the online course.

Application to an Online Career Development Course: In the situation of the career development course, we are going to assume that the students have already completed an introductory counseling course in a "hybrid" format (i.e., an online course with monthly face-to-face class meetings). Therefore, the students possess some understanding of the role of career development in the counseling process as well as some technical skills. The faculty member has never taught an online course, but has taught several other courses using the hybrid format described above.

2. *Establishment of Course Goals:* This step in the course planning process concerns articulating the goals that the faculty member expects the students to achieve as a result of the course. Various authors (e.g., Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956; Gagne, Briggs, & Wager, 1992; Marzano, 2001) have identified taxonomies to assist instructors in delineating educational goals and objectives. At many institutions, the distance learning departments will have a preferred approach for writing course goals. The following discussion of course goals is based on the work of Marzano who described a "new" taxonomy that, like Bloom's Taxonomy, articulates six levels of mental processing:

Level 6: Self-system thinking
Level 5: Metacognition
Level 4: Knowledge utilization
Level 3: Analysis
Level 2: Comprehension
Level 1: Retrieval

> Although somewhat similar to Bloom's Taxonomy on the surface, there are some profound differences. For example, the six levels of Bloom's Taxonomy do not address self-system thinking and metacognition as described in the New Taxonomy. Thus, one can argue that Bloom's Taxonomy is included in the first four levels of the New Taxonomy. Another major distinction between this work and Bloom's Taxonomy is that the New Taxonomy describes three domains of knowledge-the domain of information, the domain of mental procedures, and the domain of psychomotor procedures-which cut across all six levels of mental processing. This is in sharp contrast to Bloom's Taxonomy, which restricted its discussion of the various types of knowledge to the first level only - aptly named the "knowledge" level. (Marzano, pp. viii-ix)

Application to an Online Career Development Course: Academic courses generally focus their goals primarily in the domain of information and secondarily in the domain of mental procedures. In fact, it could be argued that, in some academic disciplines (e.g., math, life sciences) most of the educational goals would be from the domain of information. However, counselor preparation programs tend to expect that in addition to developing a strong understanding of counseling-related theories and practice (i.e., the domain of information), the counselors-in-training will also develop their abilities in both the domain of mental procedures and the domain of psychomotor procedures. Using the "Career Development" section of *The 2001 Standards* (CACREP, 2000) as a guide, course goals for an online career development course could incorporate learning from all three domains. In the domain of information, a course goal could be for the student to be able to compare and contrast the major theories of career counseling and development (Analysis level). Additionally, in the domain of mental procedures, a course goal could be for the student to be able to explain the process used in selecting appropriate career-related assessment tools when given a client's background (Comprehension level). Finally, in the domain of psychomotor procedures, a course goal could be for the student to be able to demonstrate a proper method of interpreting results from career-related assessment instruments (Retrieval level).

3. *Selection of Instructional Delivery System(s):*
   In a distance learning environment, the decision concerning instructional delivery systems should be based primarily on the first and second parts of the course planning process (i.e., the learning environment and the course goals). An additional factor that many

faculty members consider during this part of the course planning process concerns their preferred teaching methods.

Given that the focus of this chapter is online courses, the discussion of instructional delivery systems will be limited to those systems that could be used in conjunction with an online course. These tools can be divided into two areas: (a) tools for providing content, and (b) tools for providing interaction.

a. *Tools for Providing Content*: The most common method of providing remote students access to course content is through printed materials (e.g., textbooks, articles) and web pages (e.g., lecture notes, diagrams, articles). Other methods for providing content to these students could include video and audiotapes as well as optical computer disks (e.g., CD-ROM, DVD). A final method could be to have the students attend face-to-face meetings at the institution or a centralized location.

b. *Tools for Providing Interaction*: The most common methods of providing interaction (i.e., student-teacher and student-student) for remote students are: (a) electronic mail, (b) electronic bulletin boards for threaded asynchronous discussions, and (c) electronic text-based chat for synchronous discussions. These tools could stand alone or be incorporated into some type of web-based course management system (e.g., WebCT, Blackboard). Additional tools that could be used for interaction include computer-based conferencing (e.g., audio and video, or audio only) and telephone-based audio conferencing. A final method could be to have the students attend face-to-face meetings at the institution or a centralized location.

   Even though the concept of face-to-face meetings was presented in the context of being a possible tool for providing content and interaction, it is our belief that face-to-face meetings should only be included to achieve specific course-related objectives that could not be achieved using any other available tool.

Application to an Online Career Development Course: Given the students' backgrounds and the sample of course goals described previously as well as the instructor's reflective approach to the teaching and learning process, this sample course will utilize print-based and web-based materials as the primary learning resources. The secondary learning resource will be an instructor-produced (with the help of the institution) videotape of demonstrative counseling sessions that focus on career development-related issues. Additionally, the course will employ electronic mail and electronic bulletin boards for threaded asynchronous discussions. All of the course goals can be achieved using these tools; therefore no face-to-face meetings will be required for the students in this course.

4. Methods of Student Assessment: According to Lynch (2002):

> Teachers have been evaluating students since formal education began. Student mastery may be assessed through a variety of methods, including oral interviews, written tests, practical application of concepts and procedures, and asking students to teach the concept or skill to someone else. Unfortunately, both in traditional education and in Web-based education, student evaluation is often given short shrift when designing instruction. Usually this misconnection in evaluation occurs because teachers or course designers fail to create a direct relationship between instructional objectives and assessment measures. To establish this connection three key ideas are crucial:
>
> - Obtain a good match between the type of objectives you wish to measure (e.g., knowledge, skills, attitudes) and the means you use to measure it.
> - Use several data sources to gain as complete a picture as possible.
> - Remember that not all instructional objectives lend themselves to direct, precise measurement. (p. 118)

In addition to the assessment techniques used in face-to-face classrooms, most of which can either be used directly or adapted to a web-based environment, the electronic environment allows some additional tools. For example, many faculty members include in their course assessment methodology a component related to the quality of the postings on the course's electronic bulletin board. Other instructors will utilize "timed" online objective item quizzes that are automatically graded by the electronic testing software. The assessment techniques selected by the instructor should be based on the course goals.

Application to an Online Career Development Course: Given the sample of course goals presented previously, the following applies techniques that could be utilized to measure each of these goals.

- The student will be able to compare and contrast the major theories of career counseling and development (Domain of Information at the Analysis level). This goal could be assessed by having students respond to discussion prompts on a bulletin board. This would allow students to share differing perceptions concerning the major theories.

- The student will be able to explain the process used in selecting appropriate career-related assessment tools when given a client's background (Domain of Mental Procedures at the Comprehension level). This goal could be assessed by having students respond to an essay question on a proctored exam.
- The student will be able to demonstrate a proper method of interpreting results from career-related assessment instruments (Domain of Psychomotor Procedures at the Retrieval level). This goal could be assessed by having students produce videotapes of themselves role-playing these methods.

5. *Evaluation of the Learning Process:* One way of evaluating the learning process in an online environment has been suggested by Beer (2000). Specifically, Beer noted:
   In addition to testing your learners to ensure that they got the skills they needed, you also may want to evaluate your Web learning environment itself. If tests show that your learners did not get the skills they needed, it may not be the learners that need help. Perhaps they had trouble with the technology. (p. 130)

Additionally, Rosenberg (2001) reported, "The typical end-of-course evaluation, or rating sheet, is perhaps even more important for e-learning than in the classroom. With a classroom event, it is possible to observe students' reactions" (p. 220). However, the ability to directly observe students is lost in a web-based environment. Thus, the end-of-course evaluation provides an essential method of receiving feedback. Additionally, many web-based course management systems allow faculty members to design simple anonymous feedback forms that can be used as formative course evaluation tools throughout the semester. One of the current authors includes in his course a writing assignment at the end of the semester that requires the students to reflect on the course content, the assignment and activities, as well as the instructional delivery system(s). The information derived from this assignment is used to improve the course during subsequent semesters.

Application to an Online Career Development Course: Given that in this scenario this is the counselor educator's first online course, the formative evaluations would be critical to allow the faculty member to make any necessary mid-course corrections during the semester. Additionally, even with the unreliability of some end-of-course evaluation instruments, if the items on the end-of-course evaluation are similar in nature to the items on a face-to-face course evaluation, it may be possible for a faculty member to make some meaningful comparisons.

After completing the initial course plan, the counselor educator should then change the focus to planning of the individual lessons (i.e., topics, units, etc.) that will be included in the course. The final section of this chapter describes the lesson planning process and application of this process to an online career development course.

Lesson Planning

In discussing the concept of a "lesson" in a web-based online course, Horton (2000) suggested that:

> A lesson is a collection of activities and presentations that accomplish one of the sub-goals of the course. Each lesson is larger than an individual page and smaller than the whole course. ...In many ways, a lesson is a miniature course requiring its own objectives, introduction, assessments, and feedback. (p. 136)

Therefore, the first task is to divide the course into lessons. After the course is divided, the planning process for each lesson is ready to begin.

Various authors (e.g., Arends, 1997; Gagne et al., 1992) have created lesson planning models for face-to-face courses that can be applied to online courses. The salient elements of these models that have application to online course development have been suggested by Albrecht and Jones (2001) to include:

1. "Analysis of Learner Readiness
2. Identification of Instructional Objectives
3. Selection of Instructional Techniques and Resources
4. Assessment of Student Learning
5. Evaluation of the Learning Process" (p. 38)

The following discussion describes the possible use of this lesson planning model by a counselor educator in the development of one lesson within an online course in the area of career development. The specific lesson to be addressed in this example concerns the topic of major theories of career counseling and development.

1. *Analysis of Learner Readiness:* This type of analysis determines how the students will relate to the content of the individual lesson. Herring and Smaldino (1998) posited factors to consider at this step of the process concerning the learner:
   a. *Prerequisite Skills:* Does the student possess the necessary skills (e.g., technology, writing, research) to be successful in completing the lesson? For example, based on the content of a particular lesson, certain technological skills may be required

when reviewing materials on a CD-ROM that accompanied the textbook.

b. *Prior Experience with the Cognitive Tasks:* Does the student have prior experience with the topic of the particular lesson? For example, in a unit discussing a particular statistical technique, does the student understand the concepts of mean and standard deviation?

   In situations where students are less prepared for the scope of a particular lesson, the instructor should plan to provide the student with more:
   - Learning resources (e.g., print-based, web-based)
   - Structure in the design of the web-based activities
   - Time to reflect on the topic

Application to an Online Career Development Course: Given that in this scenario the lesson will address the major theories of career counseling and development, it will be important to address both the prerequisite skills and prior experience with the cognitive tasks. In reference to prerequisite skills, the skills for this lesson would be similar to the skills for other lessons in this course. In reference to prior experiences, as indicated earlier, the students have already completed an introductory counseling course. Therefore, they have been exposed to the concept of a counseling theory and should recognize the names of some of the major theorists in career counseling and development.

2. *Identification of Instructional Objectives:* Unlike course goals, which tend to be general statements of learning outcomes, instructional objectives delineate, with greater specificity, exactly what students "should be able to do when they complete a segment of instruction" (Smith & Ragan, 1999, p. 84). However, like course goals, instructional objectives can be developed in the context of the previously discussed "New Taxonomy" of educational objectives suggested by Marzano (2001).

Application to an Online Career Development Course: Given that in this scenario the lesson will address the major theories of career counseling and development, the instructional objectives for this topic would probably focus on the domain of information. Specifically, the objectives could include:

a. Describe the key components of each of the major theories of career counseling and development. (Retrieval level).

b. Describe the relationship between the key components of Roe's theory and Holland's theory. (Comprehension level)
c. Describe how Super's theory is similar to and different from Tiedemann's theory. (Analysis level)
d. Determine which of the career counseling and development theories would be most appropriate to apply to a given situation and explain the criteria used to select among the theories. (Knowledge Utilization level)
e. Describe a goal you have or might have relative to your understanding of career counseling and development theories and identify what you would have to do to accomplish this goal. (Metacognition level)
f. Describe to what extent you believe you can improve your understanding of career counseling and development theories and identify the reasoning behind this belief as well as the reasonableness of your thinking. (Self-System Thinking level).

Based on our experiences, the first four instructional objectives are fairly common in career development courses, where as the final two objectives may not be as commonplace.

3. *Selection of Instructional Techniques and Resources:* Within the context of the students' readiness for the topic, this step in the lesson planning process concerns identifying the most appropriate tools and activities to help the students achieve the specific instructional objectives. The tool component of this selection process concerns the types of learning resources that will be available to the student. The techniques component of this selection process addresses the types of activities that the student will be expected to complete related to the topic. These are the same types of decisions that instructors make in a face-to-face environment.

Application to an Online Career Development Course: Given the previous description of the students' levels of readiness for the topic of career counseling and development theories, and limiting the lesson to the first four instructional objectives listed above, the counselor educator would need to select the most appropriate resources and activities. For example, in the area of resources, the students could be expected to read the chapter(s) in the course textbook(s) related to career counseling and development theories. Additionally, the course web pages could provide the students with several hyperlinks to career counseling and development theories. Finally, the counselor educator could include on the course web site his or her personal insights (e.g., examples) relative to career counseling and development theories. In the area of activities, the counselor educator may want to identify activities related to each of the specific objectives. To elucidate, for the instructional objective to determine which of the career counseling and development theories would be most appropriate to apply to a given situation and explain the criteria used to select among the theories, the counselor educator could post a case study to the web site and have students respond to a bulletin board topic on this case study. This activity would allow the students to articulate their own perceptions while garnering an understanding of the perceptions of their classmates concerning the various theories. Furthermore, based on the students' asynchronous discussion, the instructor can respond throughout this activity to provide clarifications or expound on the career counseling and development theories.

4. *Assessment of Student Learning:* At the lesson-level, assessment may be either informal or formal. Informal assessments can be either formative or summative.

   An informal formative assessment could be built into the lesson's web site using the following technique. The instructor could include an objective type question at the end of each page of web-based material that contains two possible responses. Each response would be represented as hyperlinked text. If the student selects the correct response, the hyperlink would direct the student to another web page containing material concerning the next topic. However, if the student selects the incorrect response, the hyperlink would direct the student to a page containing additional material on the same topic. This informal formative assessment process provides an example of scaffolding. "A scaffolding structure provides additional opportunities (e.g., examples, explanations) for those students who need them, but does not require all students to complete the additional learning opportunities" (Albrecht & Jones, 2001, p. 123).

   An informal summative assessment could include an end-of-lesson web-based quiz that is automatically scored by the computer, but the results are not reported to the instructor. This quiz could be designed to incorporate feedback to the student concerning each response (e.g., your response was correct because ..., your response was incorrect because ...).

   Formal assessments at the lesson level are usually summative and can take many forms based on the instructional objectives that the faculty member hopes to achieve within the given lesson. The faculty member could require the students to complete a web-based quiz that is timed (i.e., limits their ability to "look up" answers) and not scored until all students have completed the quiz.

Additionally, the instructor could assess the students' contributions to the discussion board activities. Bauer and Anderson (2000) demarcated "an online assessment rubric that will help professors evaluate both formal writing and informal written discussions. In particular we focus on three major aspects of writing: *content, expression,* and *participation*" (p. 66). Using this rubric framework, or a similar type of tool, would be a technique to 'formally assess discussion board activities.

Application to an Online Career Development Course: Given the previous description of the resources and activities, and limiting the lesson to the first four instructional objectives listed earlier, the counselor educator would need to select the most appropriate assessment activities for this lesson. For example, in the area of informal assessment, the counselor educator could use web-based quizzes that assess the students' understanding of the career counseling and development theories. The faculty member could also use the rubric posited by Bauer and Anderson (2000) to conduct a formal assessment of the students' postings to the discussion board concerning the case study.

5. *Evaluation of the Learning Process:* Evaluation of the learning process at the lesson-level tends to be less formal than the end-of-semester course evaluations. Lesson-level evaluation may take the form of a simple web-based anonymous survey that requests student feedback concerning the clarity of the learning resources included in the lesson, perceived effectiveness of the activities to contribute to an understanding of the concepts, and the usefulness of the feedback received from the instructor. The faculty member can use the information from this survey for a twofold purpose: to adjust this lesson the next time that the course is delivered in an online format, and to adjust future lessons in the current course.

Application to an Online Career Development Course: Given the previous description of the assessment strategies, and again limiting the lesson to the first four instructional objectives listed, the counselor educator would need to develop formative techniques for receiving feedback concerning the learning process. For example, a simple web-based survey could elicit feedback pertaining to students' opinions concerning the textbook chapters for this topic, the web-based resources, and the discussion board based case study.

Conclusion

This chapter has discussed a conceptual framework for counselor educators who are considering entering the realm of cyberlearning. Specifically, the framework addressed the issues of pre-planning, course-level planning, and lesson-level planning. In addition, intertwined throughout the chapter was an example of how this conceptual framework could be applied to an online career development course.

Cyberlearning provides opportunities to many individuals who may not be able to participate in traditional campus-based counselor preparation programs. However, these opportunities will only be fruitful for the students if the online learning experience is of the highest quality. Thus, it is our belief that *planning is an essential component of developing a high quality online course*. In discussing the importance of planning in a distance learning environment, Herring and Smaldino (1998) stated the need for faculty members to "prepare, prepare, prepare, and prepare some more" (p. 19).

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Chapter Five

Converting Counselor Luddites: Winning over Technology-Resistant Counselors

Marty Jencius and Susan Paez

Computers have become an intrinsic part of our daily interactions in academia. Universities, professors and students have been introduced to all the creative possibilities these advancements in technology can offer. Along with the creative possibilities come the challenges and frustrations of these new technological developments. This chapter will explore the contemporary definition of a counselor Luddite, look at scales used to measure attitudes toward computers, and suggest obstacles and ways to overcome them in working with technology-resistant counselors and counselor educators.

Establishing a Definition of a Counselor Luddite

Current counselor resistance to technology can be compared to historic resistance to technology. Technology-resistant counselors can be considered the Luddites of the profession. The Luddite movement had its origins in England in the early 1800's with a group of textile workers who felt that the Industrial Revolution threatened their jobs (Barron, 1996; Ryder, 2002).

Some say they were led by a Charles Lud while others say by a Ned Lud, who in his clumsiness, broke two knitting looms. Soon, anytime factory owners found their equipment damaged they would attribute it to "poor Ned Lud". Inspired by the revolutionary spirit of the times and the social writings of Thomas Paine, Luddites created a small band or "army" around Nottingham and could disappear into the woods when threatened by British troops. They would come to offending factories and state that they had come on the orders of "General Ned Lud" and demand the restoration of decent wages, quality control on products, and reasonable working conditions. Faced with this much opposition, factory owners would comply without violence. Their non-violent means came to an end with a fatal attack on Burton's power loom mill in Lancashire on April 20, 1812, in which British soldiers killed many Luddites. The British government suppressed the movement by making machine-breaking a capital punishment and executing 17 violators in 1813.

Thompson (1966) advances arguments that Luddites were not unorganized, reckless, and opposed to all technology. He claims that they were opposed more so to the factory owners and the conditions that technology produced. Neo-Luddites, like their predecessors, share the same concerns about technology alienating people but unlike their predecessors embrace computer technology (Davenport, 1997). They see the personal computer as the great emancipator in relationship to owner entrepreneurship. Counselors who are struggling with embracing technology but are not resistant to technology may have similar attitudes as modern day Luddites.

Contemporary counselor Luddites have an impact on those around them. Olsen (1999) reports that in a survey of information technology specialists, 40 percent reported that helping reluctant faculty members bring technology into their teaching was the hardest part of their job. One can imagine that a parallel process occurs in introducing reluctant counselors to technology. In the case of faculty, many have ceded to their students' ability to handle technology. This creates what Olsen reports as a new kind of "oedipal aggression" in the classroom with students checking information on the Internet and challenging teachers about the accuracy of their information. The similar case could be made that many counselors have ceded to their clients' ability to handle technology. A client can be easily versed in types of therapies, the diagnosis of disorders, or the latest medications, and challenge the counselor's information and approach.

Counselor Luddites, along with Rogers' (1995) late adopters, want technology support, generally on a one-on-one basis, to work with proven applications with low risk of failure (Jacobsen, 1997). Skepticism plays a role in Luddism (Albaugh, 1997). As professionals, counselors would be reluctant to adopt technology with suspicious new claims. They may see technology as nothing more than "computer games" and lacking the personal touch that counseling traditionally provides. George and Camarata (1996) point to the role that self-efficacy plays in the Luddite's adoption of technology and provide a method for reducing anxiety in cyberanxious individuals. Fabry and Higgs (1997) point out that not much time is available for learning new technology skills when considering professional workloads and pressures. Counselor Luddites would require time to experiment with technology, share experiences with counselor colleagues, and attend technology-related training.

Preparation Standards and Student Types

Current curriculum standards for training counselors do nothing to reduce the Luddism among the profession. Counselor training curriculum does not typically incorporate technology across the process. Although the use of technology is encouraged as part of Council for Accreditation of Counseling and Related Educational Programs (CACREP) accredited counseling programs, the CACREP standards do not speak specifically to the need for counselor trainees to emerge from a degree program being able to demonstrate particular technology capabilities. In teacher training programs that are accredited by National Council for Accreditation of Teacher Education (NCATE), teacher candidates are expected to be able to demonstrate the core International Society for Technology in Education (ISTE) standards. If technology is included as part of counselor training, it is included idiosyncratically and as part of a particular instructor's teaching agenda. The instructor attempting to include technology in the classroom is often greeted by students bringing their own technology resistance.

One could imagine at least three kinds of technology-resistant counseling students - the traditional student, the returning student, and the returning counselor. The traditional student may have gone straight through an undergraduate program and managed to avoid technology requirements in his or her previous educational processes; however, those coming from a teaching background from NCATE-accredited programs should have mastered basic ISTE core, standards although that curriculum requirement is not equally employed across all teacher-training programs. We have found that in many cases teacher technology training as part of a teaching degree can be dated and not take into consideration advancements in video-streaming and Internet-based synchronous technology like chat rooms.

The second kind of technology-resistant student is the returning student who did not have much exposure to computer technology during her or his initial undergraduate degree program. This student can be apprehensive about all kinds of technology due to being unfamiliar with computers. Technophobic returning students will often try to look at non-technology alternatives to classroom assignments instead of trying to adapt to the new technology.

The third kind of technology resistant student could be the returning professional counselor who is taking additional hours for recertification. These students would have similar concerns and potential weaknesses as the returning student. Their absence from the educational system may have limited the development of their technological capabilities, but if their counseling worksite had widespread use of technology they may have maintained current skills through computer exposure at work.

Attitude Scales

Understanding the attitudes students have toward computers is a decisive factor in the development and evaluation of computer-based curricula (Woodrow, 1991). While attitudes toward computers may impact the acceptance of computers, they can also influence potential activities such as using computers as a professional or educational device (Anderson, Hansen, Johnson & Klassen, 1979). With this in mind, it is vitally important to assess and promote positive attitudes toward computer use in the classroom setting. Counselor educators can play an important role in decreasing negative attitudes and anxiety that may stand in the way of students appreciating the innovative potential computers can have on the process of learning.

The Minnesota Computer Literacy and Awareness Assessment Scale (MCLAA) was one of the first instruments developed to assess attitudes toward computers (Woodrow, 1991). This instrument contained twenty items that utilized a Likert-type scale to measure attitudes towards computers. Other researchers have developed computer attitude instruments that contained modified items from the MCLAA (Chen, 1986; Swadener & Mannaflin, 1987).

Instruments have also been developed that measure several different elements in relation to attitudes toward computers. For instance, some instruments reveal the importance positive experiences with technology have on one's attitude toward computers (Bear, Richards & Lancaster, 1987; Byrd & Koohang. 1989; Levin & Gordon, 1989). Other research has focused on gender and attitudes toward computers (Busch, 1995; Shashaani, 1994). Loyd and Gressard (1984a) utilized a thirty-item scale to assess the computer attitudes of male and female teachers enrolled in a computer development course. Results indicated that males possessed a more positive attitude toward computers when compared to their female counterparts.

Scales have also been developed to investigate the computer attitudes of students and teachers (Kleuver, Lam, Hoffman, Green & Swearingen, 1994; Woodrow, 1994). Marshall and Bannon (1986) constructed an eighteen-item scale to assess teachers' and students' attitudes toward computers. The results indicated that age was positively correlated with a positive attitude toward computers for both groups. In addition, educators presented a more positive attitude toward computers than their students.

Factors Associated with Computer Attitudes

In an examination of computer attitude scales, Woodrow (1991) proposed that there are several components that contribute to the attitudes an individual possesses toward computers. These attitudes can be found across the affect and the cognition of a person. Bear and colleagues (1987) employed computer use, computer attitude, history, social issues, and programming as the five elements that made up their computer attitude scale. Computer interest, computer confidence, computer anxiety, respect through computers, and gender equality in computer use were the dimensions that Chen (1986) utilized in the construction of a different computer attitude scale. An investigation focusing on three attitude domains - behavior, affect, and cognition - was also completed by Reece and Gable (1982).

Computer Attitude Scale (Loyd & Gressard, 1984a)

As the implementation of computers in the classroom and the counseling profession continues, it will be important to assess the computer attitudes of students. Instructors can utilize quick and efficient instruments to help measure students' attitudes towards computers. The use of a scale that is valid and reliable, as well as short in length and easy to administer, would be ideal.

The Computer Attitude Scale (CAS) (Loyd & Gressard, 1984a; 1985) is becoming the instrument of choice when researching the topic of attitudes toward computers (Nash & Moroz, 1997). It has been found to have factors that are empirically sound (Loyd & Gressard, 1984b) and has been utilized with a variety of adult populations. This instrument has been used in research with professional educators (Loyd & Gressard, 1986; Roszkowski, Devlin, Snelbecker, Aiken & Jacobson, 1988) and high school counselors (Stone, Thompson, & Lacount, 1989). Researchers in the adult education (Massoud, 1991), health, and banking fields (Henderson, Deane, Barrelle & Mahar, 1995) have also used the CAS.

A variety of rationales exist for the studies. Some use the CAS in a quasi-experimental setting to assess the value and power of educational experiences with computers (Massoud, 1991; Pope-Davis & Vispoel, 1993). Additional studies using the CAS have focused on independent variables such as age (Loyd & Gressard, 1984b; Dyck & Al-Awar Smither, 1994), gender (Busch, 1995; Chen, 1986; Shashaani, 1994; Loyd & Gressard, 1986) and computer experience (Byrd & Koohang, 1989; Levin & Gordon, 1989). Investigations have also assessed computer anxiety, computer liking, computer confidence (Loyd & Gressard, 1986; Massoud, 1991; Pope-Davis & Twing, 1991), and perceived computer usefulness (Pope-Davis & Twing, 1991) using the CAS.

Psychometric Properties of the CAS

The original form of the Computer Attitude Scale contained 30 items that offered statements of attitudes toward computers and the use of computers. Loyd and Gressard (1984a) reported that this instrument was an effective and reliable measure of attitudes toward learning about computers and the use of the technology. In 1985, Loyd and Loyd (1985) added a fourth scale, computer usefulness, to the CAS.

The second version of the CAS (see Figure 1) consists of 40 items that contain statements regarding attitudes toward computers and their use. Subjects respond to the items using one of four ordered responses ranging from strongly agree to strongly disagree. Four central attitudes create the four distinct categories of the CAS including anxiety or fear of computers, liking computers or enjoying working with computers, perceived usefulness of computers in present or future work and confidence in ability to use or learn about computers (Loyd & Loyd, 1985).

The CAS also has the following four subscales containing ten items apiece. Each subscale contains positively and negatively worded items distributed through out the assessment tool. Items on the Computer Anxiety subscale include statements such as

1. Computers do not scare me at all and,
13. I feel aggressive and hostile toward computers.

The Computer Confidence subscale contains statements like

14. I am sure I could do work with computers and,
2. I'm no good at computers.

Typical statements on the Computer Liking subscale include

27. Once I start to work with the computer, I would find it hard to stop and,
39. I do not enjoy talking with others about computers.

Finally, the Computer Usefulness subscale has items like

28. Knowing how to work with computers will increase my job possibilities and,
8. Learning about computers is a waste of my time (Loyd & Loyd, 1985).

The coefficient alpha reliabilities are .90 for the Computer Anxiety, .89 for the Computer Confidence, .89 for the Computer Liking, and .82 for the Computer Usefulness subscales (Loyd & Loyd, 1985). The Total Scale reliability was estimated at .95. The Computer Attitude Scale is considered a reliable and valid instrument for assessing attitudes toward computers (Loyd & Loyd, 1985).

Other Scales of Computer Attitude

Surveying the literature we found a series of attitude surveys on computer use. Following is a brief description of the instruments. See Table 1 for reference locations.

Affective Attitude Measure

The Affective Attitude Measure contains eighteen semantic differential items that reflect affective reactions to characteristics of computers. The scale ranges from 1 to 7 with 1 representing positive reaction, such as "easy" and "understandable" and 7 indicating a negative attitude, such as "confusing" and "difficult." The reliability coefficient for the eighteen items on this measure is 0.79 (Levin & Gordon, 1989).

Attitude Survey

Misfeldt and Stahl (1991) developed the Attitude Survey to explore student attitudes related to computers. The instrument is composed of 30 questions and utilizes a five point Likert scale. Students are given options that range from strongly agree to strongly disagree. The survey is divided into four categories: pedagogy, administration, social impact and equity.

Attitude Toward Computers

The Attitude Toward Computers scale (ATC) was developed to measure computer anxiety and other computer related attitudes. Specifically, this instrument measures computer usage, societal impact and computer appreciation (Raub, 1981). Raub described computer anxiety as a form of "state anxiety" in which the computer is a "personally threatening" stimulus. After additional research, the author identified the multidimensional elements of computer anxiety as anxiety concerning the negative impact of computers on society, computer usage anxiety, and lack of appreciation for computers.

Attitudes Towards Computers

Reece and Gable (1982) constructed a ten-item scale entitled Attitudes Towards Computers. The authors attempted to sample individual attitudes toward computers across affective, behavioral and cognitive domains. This instrument has a reliability of 0.87.

Bath Attitude Survey

The Bath Attitude Survey contains twenty-six items that inquire about computers in general (Bear, Richards, & Lancaster, 1987). The reliability for this instrument is instrument 0.94.

BELCAT

The Blomberg-Erikson-Lowrey Computer Attitude Task (BELCAT) assesses attitudes toward learning about computers and toward computers (Erikson, 1987). This Likert-type self-report measure was based on Fennema and Sherman's Mathematics Attitude Scale (Fennema & Sherman, 1977). The instrument consists of five subscales: Comfort with Computers, Computer Liking, Computers as a Male Domain, Attitudes Toward Success with Computers, and Usefulness of Computers.

Computer Anxiety Index

Montag, Simonson and Maurer (1984) developed the Computer Anxiety Index (CAIN). This instrument examines the avoidance of, caution with, disinterest in, and negative attitudes toward computers. The instrument consists of 26 statements.

Computer Assisted Instruction

The Computer Assisted Instruction (CAI) instrument was developed with the purpose of assessing student attitudes toward computer-assisted instruction (Morrell, 1992). The survey contains 20 questions based on a 5-point Likert scale.

Computer Attitude Scale

The Computer Attitude Scale consists of twelve items that assess computer usefulness (Byrd & Koohang, 1989). The reliability for this measurement is 0.86.

Computer Survey

The Computer Survey contains eleven items that inquire about computer attitude and anxiety (Stevens, 1980).

Computer Use Questionnaire

Griswold (1983) developed the Computer Use Questionnaire. This twenty-item measurement inquires about computer awareness. This instrument has a reliability of 0.75.

General Attitude Measure

The General Attitude Measure consists of twenty-two statements about computers based on a 5-point Likert scale. The options range from 1, which represents strong disagreement, to 5, which represents strong agreement (Enochs, 1984). The twenty-two items are divided into four attitude factors. The first factor, desire to become familiar with the computer, has a reliability coefficient of 0.72 on six items. Range of capable users, the second factor, has a reliability of 0.44 for four items. Factor three, the need for computers in our lives, has a reliability of 0.62 for its four items. Finally, a reliability of 0.77 is noted for the five items for factor four, the computer as an instructional medium.

MCLAA

The Minnesota Computer Literacy and Awareness Assessment (MCLAA) instrument was one of the first measures developed to assess attitudes towards computers (Woodrow, 1991). This Likert-type scale instrument contains twenty items and has a reliability of 0.93.

Perceptions of the Computer's Functional Capabilities Questionnaire

The Perceptions of the Computer's Functional Capabilities Questionnaire was developed to focus on specific functions students might perceive computers as capable of performing (Levin & Gordon, 1989). The measurement contains a list of twelve activities ranging from robotic and mechanical tasks such as "administering injections" to cognitive and creative tasks such as "playing chess." Those being administered the instrument are asked to indicate whether they believe a computer could or could not perform the activities (Levin & Gordon, 1989). The reliability coefficient is 0.55 for the twelve items on this measure.

Student Survey

Norales (1987) developed the Student Survey. This measurement consists of twenty items that assess the efficacy and usefulness of computers.

Obstacles to Changing Attitudes

According to Fabry and Higgs (1997), four obstacles stand in the way of effective use of technology in the classroom. These include teachers' attitudes and resistance to change, concerns about funding, training deficiencies, and inadequate access to technology. Teachers report that in order for this change to take place, they need support from administration, sufficient funding, training on the technology and time to implement the changes into the curriculum and the classroom. Perhaps the most fundamental and noteworthy barrier to the implementation of technology is an innate dislike for change. Hodas (1996) suggests that the structure of schools and the nature of teaching have not been changed for hundreds of years. As a result, any type of procedure or alteration that may threaten to "shake up" the steady and constant nature of schooling is perceived as a threat and will result in enormous conflict and resistance.

Ideally, schools attempt to integrate change into the environment in a manner that produces the least amount of commotion (Budin, 1991). In order for the integration of technology into classrooms to take place, teachers will need to make two essential changes. First, they must learn how to use the technology. Second, in order to implement the use of technology, they must basically change the way they instruct their students. Teachers are being asked to move toward a more student-centered classroom rather then a teacher-centered classroom. This transition represents a more challenging obstacle for teachers than simply using technology (Means & Olson, 1995).

Besides the basic resistance to change, Marcinkiewicz (1994) suggests that people stay away from computers because they are apprehensive of the loss of status and hard-earned abilities and do not have adequate knowledge and proper training. Budin (1991) supports this opinion and states that there has been an increase in teacher anxiety since computers have been introduced into schools. The main concern some teachers have regarding computers is how technology will impact their work and student learning. Other teachers express concern that computers will one day replace them. Still others feel self-conscious and embarrassed that they are not quite as knowledgeable or "up-to-date" on new technology as their students may be. As a result, teachers feel deterred from acquiring the necessary skills to effectively implement and use computer technology in the classroom (Hodas, 1996).

The way in which change takes place greatly influences success. Integrating technology use into the classroom requires a collaborative effort by all those involved in the educational system. Regrettably, when it comes to the implementation of technology in the classroom, computers have, in general, been a mandatory requirement of the system. They have been forced into the classroom, not as a tool to complement and enhance the curriculum, but rather as an end unto themselves (Young, 1991). Additionally, when such administrative directives come down, proper training and support for teacher - a key element in facilitating success - is often neglected (Paul, 1994; Means & Olson, 1995).

Individual obstacles

Cyberphobia. Phobias often create anxiety that cause individuals to isolate themselves in an attempt to avoid experiencing humiliation in the public arena. A likely reaction for some is to find support in a secluded place, far away from the condemnation of others. Others prefer to gain reassurance and encouragement from people who experience the same sense of nervousness about technology (George & Camarata, 1996).

Computer anxiety or *cyberphobia* is described as a person's propensity to experience restlessness or anxiety over the use of any technology related to computers. Those who are opposed to the use of technology may experience general anxiety. An individual who is anxious about technology is not necessarily rejecting technology or opposed to learning how to use it. It is more likely that the individual is trying to avoid taunting or even unsupportive comments from peers who may have more experience and knowledge with the hardware or software (George & Camarata, 1996).

A variety of elements can contribute to the lively struggle associated with changes and advances in technology. Individuals can perceive themselves as incompetent and can also rationalize that familiarity with the new advancements is not always necessary. Finally, the frustration one experiences can also contribute to the resistance associated with technological change (Bird, 1991).

Technology resources. In recent years several studies have been conducted concerning the use of computer technology. Two factors that appear to greatly impact teachers' use of computers are administrative support and encouragement as well as teacher training (Stanley, Lindauer, & Petrie, 1998). Support from administration could include serving as a model and showing eagerness for the technology, making necessary equipment available, and offering verbal support (Stanage, 1996). Teacher training could consist of participation in college computer courses, peer training, and staff development programs (Evans-Andris, 1996).

According to Blumberg and Greenfield (1986), the principal is the key component to technological advancement in the education arena. Martin (1996) noted that strong leadership is associated with effective schools and the principal is the change agent in this process. Thus, the principal is an essential component in setting the stage for the implementation of technology in the educational environment.

When looking at staff development, Guskey (1986) suggested certain factors were helpful in introducing computers into schools. Principals supporting computer education, the availability of equipment, as well as individually guided instruction were found to be important elements for teachers. Ayersman (1996) asserted that individuals experience a much lower level of anxiety around computers if they have had previous experience or interaction with the technology.

Parker (1997) used results from his research to support the increased use and advancement of technology and to develop a strategic plan for a university. This overall plan required cooperation and support from all faculty, staff and administrators to increase finances, and provided faculty development opportunities. The strategic plan included: a) obtaining additional software and hardware, b) finalizing the networking of faculty and lab computers, c) adding to the accessibility of the computer lab, d) offering further support for personnel, e) providing additional opportunities for faculty to receive technology training, and f) enhancing the faculty's knowledge of the opportunities to use technology as an instructional tool.

Time constraints. Quick and Davies (1999) conducted research to find out what faculty members wanted to accomplish in the development of curriculum and what support they needed in order to obtain those goals. When participants were asked, "What do you need in order to accomplish your instructional wants and needs?" a common answer was *time*. More powerfully stated, "Well, if you can put more hours in a day that would be great. I feel overwhelmed by the workload" (p.648).

Learning Styles and Technology Styles. Inquiring how specific types of technology impact the learning styles of students and utilizing that information when developing a course offers a theoretical explanation for the method (Grasha & Yangarber-Hicks, 2000). Learning style is an important element that should be taken into consideration when using technology in the educational environment. Learning style preference and student performance go hand in hand when faced with technology in the classroom (Dille & Mezack, 1991).

While students have an assortment of learning styles, the styles range in varying degrees. Some students are independent learners, whereas others may prefer more collaborative approaches. Due to life and educational experiences and even genetic make-up, some learning styles are more dominant and developed and as a result, are more frequently favored. Other styles, while somewhat undeveloped, can begin to flourish with the right amount of encouragement and support (Grasha & Yangarber-Hicks, 2000).

The "middle ground" or the relationship between technology and learning style is exemplified by Ross and Schulz (1999). They suggest that the method in which course information is displayed and assignments are organized can tap into students' various social, thinking and sensory styles. Ross and Shulz (1999) suggest that the most practical approach to online teaching is to design a course that uses a variety of formats to deliver the information and assignments. By utilizing this approach, students will be able to retrieve and understand the information the teacher is trying to present in a way that matches their style of learning.

System Obstacles

Quick and Davies (1999) noted that faculty members were very interested in having the latest, most up-to-date software to use. Many shared their interest in using new software in order to develop slide presentations and interactive applications for their students in and outside the classroom. Instructors placed high priority on having the same type of technology in their classrooms and computer labs as they did in their offices in order to best utilize the technology (Quick & Davies, 1999).

In summary, a search of the literature notes a variety of obstacles to changing attitudes regarding the use of technology in the classroom. Some barriers include teachers' attitudes and resistance to change, training deficiencies, inadequate access to technology and concerns about funding. Additionally, anxiety surrounding the use of technology (cyberphobia), technology resources, and the relationship between learning styles and types of technology raise questions and concerns for individuals who are trying to incorporate technology into their classroom. Finally, factors such as time constraints and the availability of consistent computer technology and software in the office and classroom have been discussed as hurdles to changing attitudes concerning the use of technology in the classroom.

Strategies for Changing Luddite Attitudes

Suggested strategies for reducing computer anxiety and increasing self-efficacy exist. Jencius (2000a) describes the Technology Competencies Matrix (TCM) and methods of infusing technology into a technology-resistant curriculum (Jencius, 2000b). The TCM uses International Society for Technology in Education (ISTE) standards as a benchmark for counselor and educator technology standards. Since much of the literature points to the developmental nature of change in moving Luddites to technology adopter status, the TCM incorporates developmental learning stages into the absolute guidelines that ISTE provides. Jencius (2000b) also points to how the developmental matrix allows personal latitude in adopting new technology, so that the counselor or teacher may learn in-depth along one technology or learn broad-based across many types of technology. Currently the Association for Counselor Education and Supervision (ACES) is in the process of revising its Technology Competencies for Counseling Students (http://www.acesonline.net/competencies.htm) to make them inclusive of more counselors and to incorporate selected developmental aspects of learning in the format so that those with varying levels of expertise can demonstrate success.

George and Camarata (1996) delineate instructor typologies with implications for how to move through the various typologies to the expert level. Their developmental process is based on the parameters, knowledge of new technology, and use of technology in classrooms (resisting, accepting, and demanding). They suggest typology groupings including the novice, skeptic, and agnostic that fill three cells from low to high knowledge in the resisting category. The optimist, squatter and conformist fill three cells from low to high knowledge in the accepting category, and the explorer, dabbler and expert comprise three cells from low to high knowledge in the demanding category. They suggest the novice needs an increased awareness about the benefits of and training in the use of technology and that the expert can be a great role model for the novice. They suggest that the skeptic and agnostic continue learning about the use of technology in the classroom and that adopters acculturate the skeptic and the agnostic so they see that technology use is the norm in that environment.

Wedman and Strathe (1985) provide a comprehensive and systematic description of the development of technology adoption by examining three dimensions of concerns held by adopters (information, exploration, utilization and collaboration and innovation), the context in which the technology is used (instructional, creative, management, and personal), and the organizational level (individual, groups, departments and colleges or organizations). Their three-dimensional cube provides persons attempting technology adoption with a comprehensive, structured plan.

Beyond having competencies in place and a strategic plan for the technological development of counselors and teachers, other means to increase the adoption and use of technology exist. Stanley, Lindauer and Petrie (1998) studied factors that increased an instructor's use of computer technology. Three factors emerged that significantly influenced instructors to use technology: their participation in in-service activities, having administrators provide computer-related staff development, and having administrators give verbal encouragement for the use of technology. Clearly, for novices or skeptics encouragement by administrators, including modeling by administrators, is a critical factor in establishing norms around the use of technology.

Spotts and Bowman (1993) looked at other incentives involved in getting faculty to use technology. Highly rated was release time to learn *and use* technology, student help, clerical support, stipends, and contributions to promotion, tenure and merit pay. Each was viewed as being "very critical" by 20 percent or more of the participants in the study.

Proposed Changes in Training Programs

Regarding counselor training, proposed changes to improve computer use include advancing computer use throughout the curriculum, establishing professional association and accrediting body technology competencies, and considering counselor education student learning incentives. Each proposed change has implications throughout the curriculum.

Infusion of technology throughout the counselor education curriculum would be an ambitious but potentially rewarding undertaking. Counselor educators who infused multicultural competencies into the curriculum over the last decade can certainly do the same with technology competencies. Just as counselor educators raised the question, "How does culture affect my content areas?" they could use a parallel thought process and ask "How does technology impact my content areas and how should I be able to introduce these concepts into the curriculum?" The use of many computer-based case note and client tracking systems is becoming standard in many agencies. Technologically savvy counselors need to have skill accessing and using databases that differ from the current educational standard of hand-written case notes.

In the 2001 Council for Accreditation of Counseling and Related Educational Programs (CACREP) standards, technology was introduced in a fashion that does not specify competencies, instead counselors should be adequately prepared to use technology applications in various content areas specific to disciplines such as school, marriage, and research. The authors call for a grander infusion of technology competencies into the counselor curriculum perhaps patterned on the ACES Technology Competencies or ISTE standards. This would elevate the use of technology and its part in counseling curriculum to a level that meets current professional clinical practice.

Educational incentives in technology use are seen from a counseling student's perspective. Using technology, students can time-shift aspects of their course. The lead author has used CD-ROM technology extensively to deliver course content via audio lecture with slides. Each student is given a supplemental CD-ROM for the course and is expected to listen to and watch the lectures prior to class. With technology in hand, students can access lecture material anytime they wish. Students report they appreciate the flexibility of the content delivery that permits them to complete assignments outside normal classroom hours. Additionally students report they can easily review material whenever they wish simply by returning to the CD-ROM. They also report flexibility in starting and stopping the lecture so they can review and absorb the content at their own pace. Inadvertently, but to the author's delight, once the lecture was taken out of the classroom he was forced to focus more on skill development during class time. Students enjoyed the shifting of the teaching to a participatory active learning process, different from the lecturing mode, and they did not loose any of the content by doing so; it only reinforced what they had learned from the lecture. Clearly technology had transformed the classroom, but it had also transformed the student learning process.

Summary and Conclusion

Adopting and addressing the use of technology by counselors and by counselor educators is not a new task that has emerged with the creation of the Internet. For example, the use of telephone crisis lines created quite an ethical practice dilemma for counselors in the 1960s (Wilson, Jencius, and Duncan, 1997). Since that time we have been able to identify some of the attitudinal barriers to the adoption of technology, some of the same factors associated with adjusting to any change (George and Camarata, 1996). Barriers such as resistance to change or cyberphobia, lack of resources and support, time constraints, learning styles and technology styles, and larger system issues were discussed. Approaches to teaching, pairing novices with experts, one-on-one support, achievable developmental competencies for guidance, and counselor and client incentives need to be emphasized to make technology use more attractive and real to the counselor or counselor educator. It is encouraging to think that we are able to work with our Luddite colleagues to help them become more engaged in the use of technology.

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Young, E. B. (1991). Empowering teachers to use technology in their classroom. *Computers in the Schools, 8*, 143-145.

Computer Attitude Scales

Title	Author(s)	Description	Constructs Observed	Reference Source	Original Location
Computer Attitude Scale (CAS)	Loyd & Gressard (1984)	The second version of the CAS is a Likert-type instrument that consists of 40 items which contain statements regarding attitudes toward computers and the use of them.	Confidence, computer liking, computer anxiety and perceived usefulness of computers	Loyd, B.H., & Loyd, D.E. (1985). The reliability and validity of an instrument for the assessment of computer attitudes. *Educational and psychological measurement, 45,* 903-908.	Loyd, B.H., & Loyd, D.E. (1985). The reliability and validity of an instrument for the assessment of computer attitudes. *Educational and psychological measurement, 45,* 903-908.
Affective Attitude Measure	Levin & Gordon (1989)	Measure contains eighteen items which reflect affective reactions to characteristics of computers.	General	Levin, T., & Gordon, C. (1989). Effect of gender and computer experience on attitudes toward computers. *Journal of educational computing research, 5(1),* 69-88.	Levin, T., & Gordon, C. (1989). Effect of gender and computer experience on attitudes toward computers. *Journal of educational computing research, 5(1),* 69-88.

Attitude Survey	Misfelt & Stahl (1991)	Survey consists of 30 questions based on a 5-point Likert Scale used to determine attitudes toward computerization.	Pedagogy, administration, equality and social impact	Hayes, B.G., & Robinson, E.H. III (2000). Assessing counselor education students' attitudes toward computers and multimedia instruction. *Journal of humanistic counseling, education and development, 38(3)*, 132-141.	Misfelt, R., & Stahl, W.A. (1991). Attitudes towards computerization in Canadian universities (Tech. Rep. No. 4). Ottawa, Ontario, Canada: Canadian International Development Agency. (ERIC Document Reproduction Service No. ED 338 229).
Attitude Toward Computers (ATC)	Raub (1981)	Survey consists of 25 questions used to assess computer anxiety, defined by the author as a form of "state anxiety" with the computer providing a "personally threatening" stimulus.	Computer anxiety, impact of computers on society, and computer appreciation	Gardner, D.G., Discenza, R., & Dukes, R.L. (1993). The measurement of computer attitudes: An empirical comparison of available scales. *Journal of educational computing research, 9(4)*, 487-507.	Raub, A.C. (1981). Correlates of computer anxiety in college students. Unpublished dissertation, University of Pennsylvania.

Attitude Survey	Misfelt & Stahl (1991)	Survey consists of 30 questions based on a 5-point Likert Scale used to determine attitudes toward computerization.	Pedagogy, administration, equality and social impact	Hayes, B.G., & Robinson, E.H. III (2000). Assessing counselor education students' attitudes toward computers and multimedia instruction. *Journal of humanistic counseling, education and development, 38(3)*, 132-141.	Misfelt, R., & Stahl, W.A. (1991). Attitudes towards computerization in Canadian universities (Tech. Rep. No. 4). Ottawa, Ontario, Canada: Canadian International Development Agency. (ERIC Document Reproduction Service No. ED 338 229).
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Bloomberg-Erikson-Lowrey Computer Attitude Task (BELCAT)	Erickson (1987)	Instrument is a Likert-type self-report measure of attitude toward learning about computers and toward computers based on Mathematics Attitude Scale (Fennema & Sherman, 1977)	Computer liking, comfort with computers, usefulness of computers, attitudes toward success with computers, and computers as a male domain	Gardner, D.G., Discenza, R., & Dukes, R.L. (1993). The measurement of computer attitudes: An empirical comparison of available scales. *Journal of educational computing research, 9(4)*, 487-507.	Erickson, T.E. (1987). Sex differences in student attitudes towards computers. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Portland, Oregon.
Computer Anxiety Index (CAIN)	Maurer (1983)	Scale examines avoidance of, negative attitudes toward, caution with, and disinterest in computers.	Computer anxiety	Gardner, D.G., Discenza, R., & Dukes, R.L. (1993). The measurement of computer attitudes: An empirical comparison of available scales. *Journal of educational computing research, 9(4)*, 487-507.	Montag, M., Simonson, M.R., & Maurer, M. (1984). Manual for the standardized test of computer literacy and the computer anxiety index. Iowa State University Research Foundation, Inc.

Computer Assisted Instruction (CAI)	Morrell (1992)	Survey composed of 20 responses to be answered on a scale of 1 to 5, with choices ranging from strongly agree to strongly disagree.	Attitude	Hayes, B.G., & Robinson, E.H. III (2000). Assessing counselor education students' attitudes toward computers and multimedia instruction. *Journal of humanistic counseling, education and development, 38(3)*, 132-141.	Morrell, P.D. (1992). The effects of computer-assisted instruction of students' achievement in high school biology. *School science and mathematics, 92, 177-181.*
Computer Attitude Scale	Byrd & Koohang (1989)	Contains twelve items.	Computer usefulness	Woodrow, J.E.J. (1991). A comparison of four computer attitudes scales. *Journal of educational computing research, 7(2)*, 165-187.	Byrd, D.M., & Koohang, A.A. (1989). A professional development question: Is computer experience associated with subjects' attitude toward the perceived usefulness of computers? *Journal of research on computing in education, 21(4)*, 401-410.

Computer Survey	Stevens (1980)	Eleven-item measurement.	Efficacy and anxiety	Woodrow, J.E.J. (1991). A comparison of four computer attitudes scales. *Journal of educational computing research, 7(2)*, 165-187.	Stevens, D.J. (1980). How educators perceive computers in the classroom. *Association for educational data systems journal*, 221-232.
Computer Use Questionnaire	Griswold (1983)	Twenty-item measurement.	Awareness	Woodrow, J.E.J. (1991). A comparison of four computer attitudes scales. *Journal of educational computing research, 7(2)*, 165-187.	Griswold, P.A. (1983). Some determinants of computer awareness among education majors. *Association for educational data systems journal, 16(2)*, 92-103.

General Attitude Measure	Enochs (1984)	Measure consists of twenty-two statements about computers on a Likert-type scale.	Desire to become familiar with the computer, range of capable users, need for computers in our lives, and computer as an instrumental medium.	Levin, T., & Gordon, C. (1989). Effect of gender and computer experience on attitudes toward computers. *Journal of educational computing research, 5(1)*, 69-88.	Enochs, L. (1984). The effect of computer instruction on general attitudes toward computers of fifth graders. *The journal of computers in mathematics and science teaching, 3 (3)*, 24-25.
Minnesota Computer Literacy and Awareness Assessment Instrument (MCLAA)	Anderson, Krohn, & Sandman (1980)	Instrument is a Likert-type measure that consists of 30 items.	Self confidence in the use of computers, perceived utility of computers, general attitude toward computers, and sex roles in computers.	Woodrow, J.E.J. (1991). A comparison of four computer attitudes scales. *Journal of educational computing research, 7(2)*, 165-187.	Anderson, R.E., Krohn, K., & Sandman, R. (1980). User's guide for the Minnesota computer literacy and awareness assessment. St. Paul: Minnesota Educational Computing Corporation.

Perceptions of the Computer's Function Capabilities Questionnaire	Levin & Gordon (1989)	Measure divided into three parts: an Affective Attitude Measure, which contains eighteen semantic differential variables, and two Cognitive Measures that contain a list of twelve tasks divided into four types of computerized activies.	Affective reactions to characteristics of computers, perceptions of the computer's functional capabilities and general attitudes towards computers and their use.	Levin, T., & Gordon, C. (1989). Effect of gender and computer experience on attitudes toward computers. *Journal of educational computing research, 5(1)*, 69-88.	Levin, T., & Gordon, C. (1989). Effect of gender and computer experience on attitudes toward computers. *Journal of educational computing research, 5(1)*, 69-88.
Student Survey	Norales (1987)	Contains twenty items.	Efficacy and usefulness	Woodrow, J.E.J. (1991). A comparison of four computer attitudes scales. *Journal of educational computing research, 7(2)*, 165-187.	Norales, F.O. (1987). Postsecondary students' attitudes towards computers. *Journal of computer information systems*, 15-20.

SURVEY OF ATTITUDES TOWARD LEARNING ABOUT AND WORKING WITH COMPUTERS

Brenda H. Loyd and Clarice P. Gressard
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The purpose of this survey is to gather information concerning people s attitudes toward learning about and working with computers. It should take about five minutes to complete this survey. All responses are kept confidential. Please return the survey to your instructor when you are finished.

Please check the blank which applies to you.

1. Age: 22 or less 23-25 26-30
31-35 36-40 41-45
46-50 51-55 55+

2. College level completed: 1st year 2nd year 3rd year
4th year Bachelors Masters
Doctorate

3. Major area of study: ______________________________

4. Sex: Male Female

5. Experience with learning about or working with computers:
1 week or less 1 week to 1 month 1 month to 6 months
6 months to 1 year 1 year or more

Briefly state the type of computer experience: ______________________________

COMPUTER ATTITUDE SCALE

Below are a series of statements. There are no correct answers to these statements. They are designed to permit you to indicate the extent to which you agree or disagree with the ideas expressed. Place a checkmark in the space under the label which is closest to your agreement or disagreement with the statements.

	Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1. Computers do not scare me at all.				
2. I'm no good with computers.				
3. I would like working with computers.				
4. I will use computers many ways in my life.				
5. Working with a computer would make me very nervous.				
6. Generally, I would feel OK about trying a new problem on the computer.				
7. The challenge of solving problems with computers does not appeal to me.				
8. Learning about computers is a waste of time.				
9. I do not feel threatened when others talk about computers.				
10. I don't think I would do advanced computer work.				
11. I think working with computers would be enjoyable and stimulating.				
12. Learning about computers is worthwhile.				

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	Strongly Agree	Slightly Agree	Strongly Disagree	Slightly Disagree
13.I feel aggressive and hostile toward computers.	....	....	....	....
14.I am sure I could do work with computers.	....	....	....	....
15.Figuring out computer problems does not appeal to me.	....	....	....	....
16.I'll need a firm mastery of computers for my future work.	....	....	....	....
17.It wouldn't bother me at all to take computer courses.	....	....	....	....
18.I'm not the type to do well with computers.	....	....	....	....
19.When there is a problem with a computer run that I can't immediately solve, I would stick with it until I have the answer.	....	....	....	....
20.I expect to have little use for computers in my daily life.	....	....	....	....
21.Computers make me feel uncomfortable.	....	....	....	....
22.I am sure I could learn a computer language.	....	....	....	....
23.I don't understand how some people can spend so much time working with computers and seem to enjoy it.	....	....	....	....
24.I can't think of any way that I will use computers in my career.	....	....	....	....
25.I would feel at ease in a computer class.	....	....	....	....
26.I think using a computer would be very hard for me.	....	....	....	....
27.Once I start to work with the computer, I would find it hard to stop.	....	....	....	....
28.Knowing how to work with computers will increase my job possibilities.	....	....	....	....
29.I get a sinking feeling when I think of trying to use a computer.	....	....	....	....
30.I could get good grades in computer courses.	....	....	....	....
31.I will do as little work with computers as possible.	....	....	....	....
32.Anything that a computer can be used for, I can do just as well some other way.	....	....	....	....
33.I would feel comfortable working with a computer.	....	....	....	....
34.I do not think I could handle a computer course.	....	....	....	....
35.If a problem is left unsolved in a computer class, I would continue to think about it afterward.	....	....	....	....
36.It is important to me to do well in computer classes.	....	....	....	....
37.Computers make me feel uneasy and confused.	....	....	....	....
38.I have a lot of self-confidence when it comes to working with computers.	....	....	....	....
39.I do not enjoy talking with others about computers.	....	....	....	....
40.Working with computers will not be important to me in my life's work.	....	....	....	....

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The survey is scored according to the following:

For questions 1, 3, 4, 6, 9, 11, 12, 14, 16, 17, 19, 22, 25, 27, 28, 30, 33, 35, 36, 38 Strongly Agree=4, Slightly Agree=3, Slightly Disagree=2, Strongly Disagree=1).

For questions 2, 5, 7, 8, 10, 13, 15, 18, 20, 21, 23, 24, 26, 29, 31, 32,
34, 37, 39, 40 Strongly Agree=1, Slightly Agree=2, Slightly Disagree=3, Strongly Disagree=4).

The questions are coded so that the higher the score, the more positive the attitude.

Four subscores can also be obtained from the questions.

Anxiety: 1, 5, 9, 13, 17, 21, 25, 29, 33, 37
Confidence: 2, 6, 10, 14, 18, 22, 26, 30, 34, 38
Liking: 3, 7, 11, 15, 19, 23, 27, 31, 35, 39
Usefulness: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40

Again, higher scores correspond to more positive attitude, e.g., a higher confidence score means more confidence and a higher anxiety score means less anxiety.

Permission is granted for use of this scale. In any publications arising from its use, please be sure to credit the authors, Brenda H. Loyd and Clarice P. Gressard.

Chapter Six

Supporting CACREP Programs and Curriculum with World Wide Web Resources

Thomas J. Keller and Ronald W. Goodman

Technological advances in counseling and counselor education have been profound, to say the least. From distance learning projects to CD-ROM micro-skills training to the ubiquitous e-mail, the field has been swept up in cyber applications at a startling pace. Internet availability has made it possible to access a seemingly endless volume and variety of information. Consequently, the teaching/learning process has been accelerated and enriched.

The Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2001) focuses on the teaching/learning process in counselor education programs and provides curricular and clinical standards for accreditation. Technological competency is expected along with evidence that faculty and students have good access to print and non-print resource information. Further, the Association for Counselor Education and Supervision's Technology Interest Network has developed expected technology competencies for graduates in counselor education programs (ACES, 1999).

The purpose of this chapter is to present Internet websites that align with the CACREP eight common core knowledge areas. Our goals are:

- To encourage persons new to technology to explore the Internet and advance their technology skills.
- To demonstrate a systematic way of organizing an Internet search.
- To provide Internet resource information for counselors, counselor educators, and counseling students.

The sites we have chosen are merely representative and intended to open other possibilities either from a particular site or from the user's own level of interest. As you will see, some sites are informational while others serve mainly as a source for related links. Naturally, some do both. We have tried not to serve as an advertising source for persons or companies, but some personal sites do contain excellent resource material and so were included. We also know that many of you are sophisticated Internet users who could easily provide some wonderful sites. Perhaps this information will, at the very least, provide a basic reference list for your work with students, practitioners, or clients. And finally, we wish to note that the sites chosen are currently active, but- unlike hard copy resources- may have vanished into the thin air of cyberspace when you attempt to activate them.

The eight CACREP core knowledge areas will be presented with suggestions for websites. The description of each knowledge area follows the title, but is offered in an abbreviated format. The reader can visit the CACREP website listed under Professional Identity in order to access the standards in their entirety.

Professional Identity

Studies that provide an understanding of all of the following aspects of professional functioning:

a. history and philosophy of the counseling profession
b. professional roles
c. technological competence and computer literacy
d. professional organizations
e. professional credentialing
f. public and private policy processes
g. advocacy processes
h. ethical standards of ACA and related entities

http://www.counseling.org
American Counseling Association

http://www.counseling.org/cacrep/
Council for Accreditation of Counseling and Related Educational Programs

http://www.schoolcounselor.org/
American School Counselor Association

http://www.amhca.org/
American Mental Health Counselors Association

http://isca.indiana.edu
An example of a state (Indiana) school counselor association website.

http://www.mamhca.org
An example of a state (Massachusetts) mental health counseling association website.

http://www.csi-net.org/
Chi Sigma Iota, International Honor Society for students, counselors, and counselor educators.

http://www.nbcc.org
National Board for Certified Counselors

http://www.edtrust.org
The Education Trust provides information on advocacy.

Social and Cultural Diversity

Studies that provide an understanding of the cultural context of relationships, issues and trends in a multicultural and diverse society related to such factors as culture, ethnicity, nationality, age, gender, sexual orientation, mental and physical characteristics, education, family values, religious and spiritual values, socioeconomic status and unique characteristics of individuals, couples, families, ethnic groups, and communities including all of the following:

a. multicultural and pluralistic trends
b. attitudes, beliefs, understandings, and acculturative experiences
c. individual, couple, family, group, and community strategies for working with diverse populations and ethnic groups
d. counselors' roles in social justice, advocacy and conflict resolution, cultural self-awareness, the nature of biases, prejudices, processes of intentional and unintentional oppression and discrimination, and other culturally supported behaviors that are detrimental to the growth of the human spirit, mind, or body
e. theories of multicultural counseling, theories of identity development, and multicultural competencies
f. ethical and legal considerations

http://www.tolerance.org
The National Campaign for Tolerance is a project of the Southern Poverty Law Center.

http://www.reachctr.org

Respecting Ethnic and Cultural Heritage (REACH) is a Seattle-based organization providing diversity training nationwide.

http://www.naspweb.org

A compilation of diversity articles from the school perspective. Pathways to Tolerance is a free service of the National Association of School Psychologists.

http://www.rubypayne-poverty.com

Based on the beliefs of Ruby Payne, this site provides information for the education of all children, particularly children from poverty.

http://www.nasponline.org/advocacy/glb.html

The National Association of School Psychologists' Work Group on Gay, Lesbian and Bisexual Issues site provides valuable information on the needs of sexual minority youth. Find out more about resources, allied organizations, important court decisions, and NASP activities to ensure that schools provide a safe learning environment for gay, lesbian and bisexual youth.

http://www.apa.org/ed/lgby.html

The American Psychological Association (APA), with funding from the Centers for Disease Control and Prevention (CDC), is initiating a new program to help schools provide health programs for lesbian, gay, and bisexual youth. The Healthy Schools Project for Lesbian and Gay Students (HSP) seeks to reduce risks of HIV infection, sexually transmitted diseases, and other important health problems of these youth.

http://pflag.org

Parents, Families and Friends of Lesbians and Gays (PFLAG) is a national non-profit organization with a membership of over 80,000 households and more than 425 affiliates worldwide. The parents, families and friends of lesbian, gay, bisexual and trans-gendered persons celebrate diversity and envision a society that embraces everyone, including those of diverse sexual orientations and gender identities.

http://www.outproud.org
The Web site for OutProud, The National Coalition for Gay, Lesbian, Bisexual & TransgenderYouth, provides a wide range of resources available for youth and educators.

http://blackquest.com
Provides African American and Black History Resources.

http://www.albany.net/~bginett/native.html
A compilation of 342 Native American sites.

http://www.si.edu/nmai
The National Museum of American Indians (NMAI) is part of the Smithsonian Institution.

http://www.eiteljorg.org
The Eiteljorg Museum of American Indians and Western Art is dedicated to the appreciation and understanding of American Indian and Western art and the many cultures of North America.

http://www.isna.net
The Islamic Society of North America

http://www.latinworld.com
A search engine for Iberoamerica and the Caribbean.

http://racerelations.about.com/newsissues/racerelations/library/weekly/aa060200a.htm
Provides information on race relations and white privilege.

http://uts.cc.utexas.edu/~rjensen/freelance/whiteprivilege.htm
Contains information on the topic of white privilege.

http://www.hbo.com/hate
A new series on HBO focusing on hate on the Internet. Did you know that as of early 2001 there were 366 U.S.-based hate sites on the WWW, up from 305 a year earlier? This includes pages from Klan, neo-Nazi, racist Skinhead, Christian Identity, black separatist, neo-Confederate, and other hate groups.

http://www.stopthehate.org
Provides anti-hate resources including downloadable graphics.

http://www.muohio.edu/diversityplan/
An example of one university's diversity plan.

Human Growth & Development

Studies that provide an understanding of the nature and needs of individuals at all developmental levels, including all of the following:

a. theories of individual and family development across the life-span
b. theories of learning and personality development
c. human behavior
d. strategies for facilitating optimum development over the life-span
e. ethical and legal considerations

http://www.bullying.org/
Site emphasizes victims of bullying are not alone. Filled with stories, drawings, poems, and music created by victims.

http://www.cfchildren.org/bully.html
A list of links to articles, resource guides, and web sites with tips on how families and educators can deal with bullying behaviors and situations.

http://www.nationaleatingdisorders.org/p.asp?WebPage_ID=337
General information about eating disorders and body image concerns. Referrals to treatment centers, doctors, therapists, and support groups. Educational curriculum, promotional items, videos, books, and more.

http://www.edreferral.com/
The Eating Disorder Referral and Information Center is dedicated to the prevention and treatment of eating disorders. This site provides assistance, in the form of information and resources, to those suffering with eating disorders to get them started on the road to recovery and healthy living.

http://www.whitehousedrugpolicy.gov/schoolzone/index.html
The School Zone Home Room provides links to a variety of helpful and useful sites dealing with safety issues, citizenship, and crime prevention.

http://www.lib.vt.edu/subjects/huma/
Library of human development resources, including related web sites.

http://www.teachingteens.com/
An educator's online resource for teaching puberty and menstruation.

http://www.nationalcac.org
Description of developmental stages ranging from newborn infants to late adolescence. Sponsored by Hawaii Chapter, National Committee for Prevention of Child Abuse

http://www.schoolpsychology.net/
School Psychology Resources for Psychologists, Parents and Educators on learning disabilities, ADHD, functional behavioral assessment, autism, adolescence, parenting, psychological assessment, special education, mental retardation, mental health, and more.

http://www.multi-intell.com/
Description of multiple intelligences

http://www.mhhe.com/socscience/devel/life/devel-4.htm
Life-span developmental resources with numerous links from childhood to adulthood, covering different developmental topics.

http://www.kidshealth.org/parent/growth/
Informational articles on growing up, communication, feeding and eating, growth, learning and playing, medical care and sleep.

http://www.kidsource.com/
Informational articles on health and safety, education, homework, and parenting.

http://highered.mcgraw-hill.com/sites/0072413646/student_view0/glossary.html#glossarylayer20
Online glossary of human development terms by McGraw-Hill.

http://www.disciplinehelp.com/
Great resource that addresses behaviors, including ways to deal with over 100 types of misbehaviors.

Career Development

Studies that provide an understanding of career development and related life factors, including all of the following:

a. career development theories and decision-making models
b. career, vocational, educational, occupational and labor market information resources, visual and print media, computer-based career information systems, and other electronic career information systems
c. career development program planning, organization, implementation, administration, and evaluation
d. interrelationships among and between work, family, and other life roles and factors including the role of diversity and gender in career development
e. career and educational planning, placement, follow-up, and evaluation
f. assessment instruments and techniques that are relevant to career planning and decision making
g. technology-based career development applications and strategies
h. career counseling processes, techniques, and resources
i. ethical and legal considerations.

http://icpac.indiana.edu/
Indiana Career and Postsecondary Advancement Center includes a career inventory, career information, and many career links.

www.act.org/path/secondary/career.html
Career planning information from American College Testing (ACT).

http://www.careerkey.org/english/
The career key will help in choosing a career, college major, or changing a career. Thousands visit daily for free career assistance.

http://www.careers.org/

Over 4,000 links to jobs, employment, job search, education, career services, and career references organized by topic and region.

http://www.acinet.org/acinet/

Wage and employment trends, occupational requirements, state-by-state labor market conditions, millions of employer contacts nationwide, and the most extensive career resource library online.

http://www3.dist214.k12.il.us/guidance/careerinfo.html

Guidance resource homepage with categories containing many useful links.

http://www.njsca.org/col/col&car.htm

New Jersey School Counselors web page containing career and college information and extensive links.

http://mois.org/moistest.html

Michigan Occupational Information System Self-Assessment Career Survey

http://mapping-your-future.org/planning/

Planning a Career assists in how to choose a career and how to reach your career goal. You can also pick up useful tips on job hunting, resume writing, and job interviewing techniques.

http://career.missouri.edu/holland/

The *Career Interests Game* is designed to help you match your interests and skills with similar careers. It can help you begin thinking about how your personality will fit in with specific work environments and careers

http://www.careerware.com/

North America's leading provider of career and educational planning solutions, includes e-choices and the e-guidance center.

http://www.jobweb.com/catapult/

A site that contains numerous links and resources on career choices, assessments, college information, job search sites, and employment centers.

http://www2.widener.edu/~keh0002/linklist.htm

Site that organizes links by categories that include, financial aid, college searches, scholarships, career resources, study skills, parent resources, and teacher resources.

http://www.monster.com/

Global network for posting resumes, job search, and career information.

http://www.careercc.com/links/search.cgi?query=Assessment

Variety of career assessments for different developmental levels.

http://www.bls.gov/oco/

The *Occupational Outlook Handbook* is a nationally recognized source of career information and describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects in a wide range of occupations.

Helping Relationships

Studies that provide an understanding of counseling and consultation processes, including all of the following:

a. counselor and consultant characteristics and behaviors that influence helping processes
b. an understanding of essential interviewing and counseling
c. counseling theories
d. a systems perspective that provides an understanding of family and other systems theories and major models of family and related interventions
e. a general framework for understanding and practicing consultation
f. integration of technological strategies and applications within counseling and consultation processes
g. ethical and legal considerations

Psychoanalytic

http://www.apsa.org

The American Psychoanalytic Association website provides membership and conference information along with content information, links, and a newsletter.

Self Psychology

http://www.selfpsychology.org

Provides information on the psychoanalytic theory of Heinz Kohut.

Existential Psychology

http://members.aol.com/timlebon/extherapy.htm

This is an individual's personal website, but provides very good information and links.

Adlerian Psychology/Individual Psychology

http://www.alfredadler.org

The North American Society of Adlerian Psychology website provides helpful links, a newsletter, and information on theory and practice.

http://www.utexas.edu/utpress/journals/jip.html

The Journal of Individual Psychology website provides current articles and archived material.

Gestalt Therapy

http://www.gestalt.org

Provides information, newsletter, and links to the International Gestalt Therapy Association as well as articles from The Gestalt Journal.

http://www.aagt.org

The Association for the Advancement of Gestalt Therapy is dedicated to theory, philosophy, practice, and research.

http://www.gestaltcenter.net

This is a personal website but provides good descriptive information and links.

http://www.g-g.org/gej/

Gestalt! is an electronic journal with full-text articles, interviews, and information about Gestalt therapy, theory, practice, and practitioners.

Transactional Analysis

http://www.ta-tutor.com/ztastudy.html

Provides biographical material on the founder, Eric Berne, theoretical material, and links to international websites through the International Transactional Analysis Association.

Rogerian/Client-Centered Counseling

http://www.geocities.com/hotsprings/2249/cctpca.html

The purpose of the chat room is to provide individuals interested in client-centered therapy/person-centered approach a venue in which to engage in a virtual encounter with others.

http://www.adpca.org

The Association for the Development of the Person-Centered Approach is an international network of individuals who support the development and application of the person-centered approach.

Reality Therapy

http://www.wglasser.com/

This website of the founder, William Glasser, provides articles and links to the International Journal of Reality Therapy.

http://www.choicetheory.com

Provides description of the theory as well as links and training opportunities.

Behavioral/Cognitive-Behavioral

http://www.nacbt.org

The National Association of Cognitive Behavioral Therapy provides descriptive information, history, names/biographies of leaders in the field, chats, and links.

http://www.rebt.org

The website of the founder of Rational Emotive Behavior Therapy, Albert Ellis, provides discussion, information, training, and links.

http://www.aabt.org

The Association for the Advancement of Behavior Therapy provides membership information, resources (special Sept 11th resource), and links.

Brief Solution-Focused Therapy

http://www.brief-therapy.org

The website for the developers of this approach, Steve deShazer and Insoo Berg.

http://www.brieftherapy.org.uk

Provides descriptive information and practice notes on SFT.

Family Systems

http://www.mftsource.com

Provides a search engine for systems theorists and marriage and family therapy practice.

http://www.georgetownfamilycenter.org/

The website for one of the pioneers in family systems theory, Murray Bowen.

http://www.avanta.net

A website dedicated to the pioneering family systems work of Virginia Satir.

Related Sites

http://www.psychcentral.com

Provides a search engine for various mental health topics and theorists.

http://www.e-help.com

Provides a search engine for psychotherapy and self-improvement approaches.

http://www.motivationalinterview.org

Provides information on various aspects of motivational interviewing. Includes articles and discussions of clinical issues.

http://coe.fgcu.edu/faculty/sabella/cerc/index.htm

Provides links to counseling-related sites, counselor education course syllabi, and related counseling resources and listservs.

Canadian International Development Agency. (ERIC Document Reproduction Service No. ED 338 229).

www.ed.uab.edu/cinematherapy/nav.html

This site is dedicated to furthering the practical and theoretical use of cinematherapy in school counseling, private practice, and counselor education. Provides examples of therapeutic application, synopses of research in the literature, applicable readings, and links to pertinent sites.

Group Work

Studies that provide both theoretical and experiential understandings of group purpose, development, dynamics, counseling theories, group counseling methods and skills, and other group approaches, including all of the following:

a. principles of group dynamics
b. group leadership styles and approaches
c. theories of group counseling
d. group counseling methods
e. approaches used for other types of group work
f. professional preparation standards for group leader
g. ethical and legal considerations.

http://www.psych.mcgill.ca/labs/iagp/IAGP.html

The International Association of Group Psychotherapy website provides membership, conference, and training information.

http://asgw.educ.kent.edu

The Association for Specialists in Group Work (ASGW) promotes quality in group work training, practice, and research both nationally and internationally. The website is a resource base for teachers, students, and practitioners of group work and includes both organizational information and professional resources.

http://www.artswire.org/asgpp/

The American Society of Group Psychotherapy and Psychodrama was founded in 1942 by J. L. Moreno, MD (1889-1974). It is the pioneer membership organization in group psychotherapy and continues to be a source and inspiration for ongoing developments in group psychotherapy, psychodrama, and sociometry.

http://www.groupsinc.org/
The American Group Psychotherapy Association is an interdisciplinary community that has been enhancing practice, theory and research of group therapy since 1942.

http://www.apa.org/journals/gdn.html
Group Dynamics: Theory, Research, and Practice, an APA journal, provides current and past issues.

Related Sites

http://cybercounsel.uncg.edu
Go to Presentations Library and review William Attridge's PowerPoint presentation on Group Counseling Ethics.

These three sites provide suggestions for icebreakers in group counseling.

http://www.flora.org/mike/poped/icebreakers.html
http://home.earthlink.net/~tlcarothers/ice.htm
http://www.uwm.edu/Dept/SOAR/Lead/Icebreak.html

These three sites provide examples of actual group counseling programs.

http://www.sfasu.edu/ccs/counseling/grpcouns.html
http://www.ithaca.edu/counseling/group.htm
http://www.wm.edu/OSA/counsel/Group.htm

Assessment

Studies that provide an understanding of individual and group approaches to assessment and evaluation, including all of the following:

a. historical perspectives concerning the nature and meaning of assessment
b. basic concepts of standardized and non-standardized testing and other assessment techniques
c. statistical concepts
d. reliability (i.e., theory of measurement error, models of reliability, and the use of reliability information)
e. validity (i.e., evidence of validity, types of validity, and the relationship between reliability and validity

f. age, gender, sexual orientation, ethnicity, language, disability, culture, spirituality, and other factors related to the assessment and evaluation of individuals, groups, and specific populations
g. strategies for selecting, administering, and interpreting assessment and evaluation instruments and techniques in counseling
h. an understanding of general principles and methods of case conceptualization, assessment, and/or diagnoses of mental and emotional status
i. ethical and legal considerations.

http://www.unl.edu/buros/
Website for the Buros Mental Measurement Yearbook

http://www.behavenet.com/capsules/disorders/dsm4TRclassification.htm
Online access to DSM-IV information

http://www.win.net/insightsys/question.htm
Find out about your personality type by completing the simplified Myers-Briggs questionnaire and determining your four-letter code.

http://www.keirsey.com/cgi-bin/newkts.cgi
The Keirsey Temperament Sorter II is a questionnaire that tells you if you're an Artisan, Guardian, Rationalist or Idealist. Everyone who completes the Sorter receives a Free Temperament description with the opportunity to purchase the full 10-Page Temperament Report and the new Career Report.

http://www.review.com/career/careerQuiz1.cfm?careers=6&menuID=0
Princeton Review offers career articles along with a questionnaire to estimate your personal interests and usual style.

http://www.queendom.com/tests/index.html
Queendom offers the largest online battery of professionally developed and validated psychological assessments. A pioneer and leader in online testing, Queendom has served more than 250 million tests in nine different languages.

http://users.rcn.com/zang.interport/personality.html
Simple personality test based on color and shape.

http://www.lwc.edu/staff/dkelley/Socl345/validity/sld001.htm
A PowerPoint presentation on measurement reliability and validity.

http://www.hemweb.com/library/glossary.htm
A glossary of measurement terms.

http://www.uwsp.edu/psych/stat/5/CT-Var.htm
Measures of central tendency and variability.

Research & Program Evaluation

Studies that provide an understanding of research methods, statistical analysis, needs assessment, and program evaluation, including all of the following:

a. the importance of research and opportunities and difficulties in conducting research in the counseling profession
b. research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research
c. use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy
d. principles, models, and applications of needs assessment, program evaluation, and use of findings to effect program modification
e. use of research to improve counseling effectiveness
f. ethical and legal considerations

http://www.ats.ucla.edu/stat/spss/notes/spss_all.htm
Web pages that contain notes on SPSS and movies. The movies show you the computer screen while you hear the teacher describe and explain how to use SPSS.†

http://www.slais.ubc.ca/resources/research_methods/default.htm
Research methods resources on the WWW

http://www.socialpsychology.org/methods.htm
Links on research tips, methodology, ethics, statistics and data analysis.

http://www.psychwww.com/resource/apacrib.htm
APA style resources.

http://ericae.net/
Ericae.net provides balanced information concerning educational assessment, evaluation and research methodology, as well as resources to encourage the responsible use of educational data.

http://davidmlane.com/hyperstat/index.html
Hyperstat online and other recommended statistic resources.

http://www.randomizer.org/
This web site is designed to assist researchers and students who want an easy way to perform random sampling or assign participants to experimental conditions.

http://members.aol.com/johnp71/javastat.html
Over 600 links, including 380 calculating pages.

http://kerlins.net/bobbi/research/qualresearch/
Resources for conducting qualitative inquiry. Of particular note is the extensive bibliography of qualitative research resources.

http://www.counseling.org/resources/ethics.htm#eg
American Counseling Association section on ethics in research.

http://www.mapnp.org/library/evaluatn/fnl_eval.htm
Basic guide to program evaluation.

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Chapter Seven

Understanding Online Counseling Services Through a Review of Definitions and Elements Necessary for Change

J. Michael Tyler and Lorraine J. Guth

It is easy, sitting comfortably ensconced in the early stage of the 21st century, to look at the technology that surrounds our lives and forget how recent the introduction of many of these advances has been. The Internet, one of the more pervasive technological advances, has moved from a curiosity used by academics and the military to a worldwide phenomenon used by children for communication, adults for information, and uncounted millions for entertainment. Every aspect of American life seems to have been reworked to accommodate this new medium, and new technologies spring up regularly allowing us easier access, quicker data transfer, and more useful adaptations.

In this environment, it seems almost incomprehensible to recall that the World Wide Web (WWW), that aspect of the Internet which has fueled its commercial popularity, was started in 1991 by the CERN Research Center. The first web page posted in the United States went online December 10 of that same year (Festa, 2002). In slightly more than 10 years we have gone from the first web site to billions of individual pages. While an exact count of web pages is impossible, on June 14, 2002, Google, a popular search engine, claimed to have over 2 billion pages indexed (Google, 2002). Over 30 million separate domains have been registered (Domain Stats, 2002). A search for the term "counseling online" using Google resulted in 814,000 sites identified. These enormous numbers suggest the importance of the Internet, the availability of massive amounts of information, and the scope of potential impact this medium represents.

Like the World Wide Web itself, the connection between counseling and the Internet is not very old. A search of PsychINFO on the terms "counseling Internet" resulted in only 88 citations dating back to 1995. A similar search on the terms "therapy Internet" resulted in citations dating back only to 1996. It is also known that early adopters of technology were presenting papers at conferences during this same time period (Tyler & Bannan, 1995; Bryant, 1995). Thus, it appears that widespread discussions of the connection between the Internet and counseling services is probably not much more than eight years old.

In this relatively brief span of time, many clinicians and agencies have sought to use the World Wide Web as a means to access clients, impart information, advertise, or educate. Increasingly, counselors and other mental health professionals are seeking to provide or to supplement client services over the Internet. The promise that this medium offers is great; access to greater numbers of clients, removal of barriers to access for clients, more flexibility in scheduling, decreased costs, and more choice for clients are a few of the strengths that proponents identify. If these characteristics are shown to be true, then the medium does appear to hold promise for mental health professionals. However, others argue that too little is known about the medium to be offering widespread services, that effective counseling cannot be offered in a text-based environment, and that counseling services may suffer from a rush to move into this new frontier.

Unfortunately, amidst all the hype and publicity, the reality of counseling services that are currently provided over the Internet may be misunderstood. Websites may make claims that are broader than the services they actually deliver, and the services delivered may actually be less extensive than many professionals believe. Among consumers, the misinformation may be even greater. What consumers refer to as "online counseling" may be better described as education services, and what professionals may refer to as "online services" may actually be heavily supplemented with phone contact or even personal meetings.

This chapter will help to clarify the realities and dispel some myths surrounding online counseling services. First, definitions of counseling will be considered to help the reader determine if online services are counseling, or if they may be better termed as educational, consultative, or supportive services. Second, research addressing elements necessary for effective counseling will be reviewed to help the reader consider the potential effectiveness of services and where additional improvements may be of help. Third, the chapter will review the range of services that are readily available on the Internet. Finally, attempts will be made to consolidate this information in preparation for chapters that follow in this text, which focus on specific online counseling activities.

Defining Counseling

In surveying the literature regarding the definition of counseling, it is apparent that there is not one single universal definition of the term. The following examples show how the term is conceptualized:

The American Counseling Association (2002) stated:

> Professional counseling is the application of mental health, psychological or human development principles, through cognitive, affective, behavioral or systemic interventions, strategies that address wellness, personal growth, or career development,as well as pathology (http:www.counseling.org/consumers_media/servingallpeople.htm).

Nugent (2000) wrote:

> Professional counseling is a process during which counselor and client develop an effective relationship, one that enables the client to work through difficulties. (p. 2)

Nystul (1999) stated:

> Counseling is an attempt to balance the subjective and objective dimensions of the counseling process. The counselor, like an artist, can sensitively reach into the world of the client, yet on some level maintain a sense of professional and scientific objectivity. (p.2)

Hershenson, Power & Waldo (1996) wrote:

> Counseling is a proactive, holistically oriented process for helping persons learn to cope with problems of living or for promoting healthy development. It is an interpersonal process involving a professional with the requisite graduate education and experience in counseling (the counselor), using scientifically valid methods, working with an individual, family, group, organization, or segment of a community that is seeking assistance (the client). This process involves empowering the client to decide on feasible goals and to identify, develop, and use personal and environmental resources to attain these goals. The process may be facilitative..., preventative..., remedial..., rehabilitative..., or enhancing... (p. 6)

Vacc & Loesch (2000) & Gladding (2000) point out that there appears to be a high level of agreement about certain common aspects of the counseling process. These commonalities among the various definitions are synthesized below:

1. Counseling is a process.
2. The core of the counseling process is the relationship between the counselor (person providing assistance) and client (person receiving assistance).
3. The counselor is appropriately trained, ethical, and professional.
4. Counseling deals with wellness, personal growth, career, and pathological concerns.
5. Counseling moves through orderly, evolving, identifiable stages.
6. Counseling can be provided via a variety of modalities, theories, and specialties.
7. Counseling can be provided within developmental, preventative, and/or remedial, perspectives.
8. Counseling is based on an identifiable knowledge base, is practiced in a manner in which the relationship between the knowledge base and counseling behaviors can be identified, and is amenable to evaluation through application of professionally accepted methodologies.

These shared components of counseling provide a framework from which the concept of cybercounseling can be examined and discussed.

It is important to recognize and acknowledge the distinction made in the literature between counseling and psychotherapy. Peterson & Nisenholz (1999) contend that the one main difference between these terms is that counseling deals more with developmental issues whereas psychotherapy deals with more serious psychopathology. However, more recently it has been recognized that counselors do deal with pathology as noted in the American Counseling Association definition of counseling. Because these terms are at times used interchangeably by others, and because it is difficult to determine the distinction that professionals offering online services may make, in this chapter the authors will use these terms interchangeably.

Four Common Elements of Counseling and Psychotherapy

When thinking about the counseling process it is important to consider what factors promote growth and change in clients. In a review of the literature, Walborn (1996) found that numerous theorists have identified therapeutic factors that are common to all theories/modes of counseling and psychotherapy. Walborn concludes that "four process variables are necessary for change: (a) a therapeutic relationship; (b) cognitive insight; (c) affective experience; and (d) appropriate client expectations" (p. 116). A thorough review of the literature regarding these process variables is beyond the scope of this chapter. However, a brief overview of each process variable along with some relevant research will be offered.

The Therapeutic Relationship

When discussing the counseling process Yalom (1980) emphasized, "it is the relationship that heals" (p. 401). Stiles, Shapiro & Elliot (1986) defined the therapeutic relationship as "a positive emotional bond and sense of mutual collaboration" between a counselor and a client (p. 173). When discussing the key factors that contribute to effective counseling relationships, Rogers (1957) emphasized the importance of genuineness, empathy, and unconditional positive regard. Genuineness refers to the counselor being real or authentic. Empathy is when a counselor understands the client from his/her frame of reference and communicates this understanding. Unconditional positive regard involves the counselor having a respectful, accepting, and prizing attitude toward the client. As these core conditions are present in a counseling relationship, a climate of safety and trust is promoted where a collaborative counseling relationship develops (Walborn, 1996). Numerous researchers have documented the importance of a good therapeutic relationship in achieving positive counseling outcomes (Garfield, 1994; Goldfried, Greenberg & Marmar, 1990; Luborsky, Barber & Crits-Christoph, 1990; Orlinsky, Grawe & Parks, 1994; Sexton & Whiston, 1994).

Cognitive Insight

Walborn (1996) contends that some form of client cognitive insight is necessary for change. Gelso, Kivlighan, Wine, Jones & Friedman (1997) define insight as the "extent to which the client displays accurate understanding of the material being explored. Understanding may be of the relationship, client's functioning outside of counseling, or aspects of the client's dynamics and behavior" (p. 212). Thus, this variable relates to the client's belief that the new insights can help to resolve his or her issues.

When reviewing the literature related to this process variable, Claiborn (1982) & Walborn (1996) concluded that numerous empirical studies indicate that cognitive insight is an important process variable. For example, O'Conner, Edelstein, Berry & Weiss (1994) found that the higher the level of client insight across counseling, the better the outcome. Additionally, Kivlighan, Multon & Patton (2000) found that when there was an increase in insight during the course of counseling, there was a reduction in symptomology and client complaints. However, other studies do not support this conclusion (Gelso, Kivlighan, Wine, Jones & Friedman, 1997).

Affective Experience

"By providing a secure and safe environment in which feelings may be expressed, therapists supply the much-needed motivation for change" (Walborn, 1996, p.121). Greenberg & Safran (1987) believe the experiencing of emotions in counseling involves the following six processes: acknowledgement of feelings, creation of meaning, arousal, taking of responsibility, modification of dysfunctional affective responses, and expression of feelings in the therapeutic relationship. Therapeutic change can occur when the counselor provides a holding environment where clients can be with the feelings that have been too painful to integrate or come to terms with (Teyber, 2000).

Appropriate Client Expectations

Regardless of the type of counseling utilized, client expectations about the process may impact treatment. If client expectations are not met, they may refuse to cooperate or prematurely terminate (Barich, 2002). Clients are more likely to remain in counseling if they are motivated and have realistic expectations of what to expect in counseling and would thus be more likely to change (Strupp & Binder, 1984; Walborn, 1996). This more positive outcome may be facilitated if the counselor guides the client in an exploration of motivation, expectations regarding the helpfulness of counseling, and an understanding of the process (i.e. roles, responsibilities, length of treatment). In fact, Tokar, Hardin, Adams & Brandel (1996) found that those clients who expect to assume personal responsibility during their work in the counseling process are more likely to have a collaborative and productive counseling experience. Research has also shown that when clients' expectations are matched by the counselor, they have greater satisfaction with the service provided and are impacted more by counselors' interventions (Harrington, 1993). Additionally, Garfield (1994) cited a number of research endeavors that have found a correlation between the expectations of the client and the outcome of the counseling experience. These findings support the notion that productive counseling can occur if counselors adjust to the expectations of the client and help them to modify expectations that may be unrealistic (Barich, 2002).

This understanding of counseling and the counseling process indicates that effective counseling requires the inclusion of certain elements. By focusing on these key elements, it is possible to review counseling programs, counseling theories, and specific counseling services to determine the likelihood that essential characteristics exist suggesting the likelihood of positive outcomes. Of course, to definitively determine outcomes, evaluation studies must be conducted. But in the rapidly changing world of the Internet, the provision of services seems to be outpacing the ability of the profession to conduct outcome research. As a step toward understanding online counseling services without the benefit of significant research, the following section will review services that are currently being offered from the framework established in the first portion of this chapter.

Online Counseling Services

As noted earlier, a web search for "online counseling" returns a tremendous number of potential sites to review. However, the truth is that a relatively small number of those sites returned are actually sites that provide online counseling services. Using more advanced search techniques, a more realistic compilation of 121 sites were identified. Reviewing these sites, over 50% were directories that contained lists of online counseling sites and the lists were quite repetitive. Other sites that were identified in this search included debt counseling, sites no longer active, and duplicate sites. This Google (google.com) search resulted in 20 sites that actually were available counseling sites. A review of the directories found in the Google search increased the overall number to 92 sites that a client might easily find if they were searching for online counseling services.

In this process, one of the more interesting findings was that many sites that have been catalogued are no longer in service. On one directory listing (Woman 2 Woman, 2002) 65% of the sites listed were no longer active. This may indicate that a large number of individuals and organizations have attempted to create and maintain web sites, only to abandon the project for unknown reasons.

The list of 92 sites was carefully reviewed to determine what services were offered. After reviewing each web site individually, five more sites were removed because they offered only telephone and traditional office-based services, and four were removed because they offered only office-based services. This resulted in a final list of 83 sites available in the summer of 2002 that offered some online services (note that this list is not intended to be exhaustive, but representative). Figure 1 offers a breakdown of the types of services that these sites advertise.

E-mail based services were the most widely employed method of providing online services. Typically, sites offering e-mail counseling charge by the e-mail, or by the time required to craft a response to the client's e-mail. In some cases, client's can purchase a predetermined number of e-mail responses at a reduced rate, or unlimited e-mails for a specific period of time.

Table 1. Types of Service Offered by 83 Online Counseling Sites

Service Modality	Number*	Percent
E-mail based	65	78
Text-Chat	47	57
Telephone	39	47
Video-Conferencing	10	12
Group Text-Chat	7	8
Online Assessment Materials	7	8
Snail Mail Services	5	6
Bulletin Boards	4	5
Online Audio-Conferencing	2	2
Online Journaling	1	1

*Number of sites in table does not equal number of sites reviewed because most sites offered more than 1 type of service.

Text-based chat services were the second most common service approach. Typically, these sessions require a pre-determined appointment time and clients are charged by the half-hour or hour, although some sites charge by the minute. A few sites did advertise that they had counselors standing by and available for immediate chat sessions using Mirabilis ICQ or some other instant messaging program. Another very common approach was to provide counseling via the telephone. Telephone services are generally billed in a manner similar to traditional face-to-face services. The high percentage of sites offering telephone services indicates that many counselors are looking for ways to maintain relationships that are as close as possible to more traditional face-to-face counseling. Of those services offering e-mail counseling, 38% also offered telephone-based services. Of those offering counseling via chat programs, 57% also offered telephone-based services.

A relatively small group of sites (12%) was attempting to provide services using video-conferencing technology. Such video-based services may offer the best opportunity to create a counseling interaction analogous to traditional face-to-face counseling. The quality of these services is highly dependent on the manner in which the practitioner and client access the Internet as well as the software and hardware used. When both parties have available quality equipment and high-speed access, a reasonable video stream can be established that will allow the counselor to view most large motor movements (hand gestures, yawns, etc), although some small movements (clenched fists, stiffening of upper torso muscles) will still be difficult to detect. Common dial-up connections will provide low quality video streams that will be seen as a series of low resolution still images rather than streaming video. In this case, large amounts of information will be lost. In addition, to accommodate the bandwidth demands of the video stream, the audio quality is often reduced, creating difficulty in understanding voice tone, pacing, and inflection.

The first section of this chapter reviewed literature on what constitutes counseling and what makes counseling effective. The second section identified what online services are readily available. It is now possible to consider if the currently available online services possess the elements required to be considered counseling and the extent to which they possess the elements necessary for effective counseling.

Earlier, eight elements were identified as common components of the counseling process. The first two of these components are readily identifiable in online services. Online services clearly represent a process of exchange and seek to build a relationship between the individuals involved.

The third component - the counselor is appropriately trained, ethical and professional - may raise a concern. In some cases, services provided online are not provided by professionally trained individuals. This is apparent at New Hope Online (2002), an organization offering Christian counseling services, that is largely staffed by volunteers without formal training. While this information is readily available, its meaning to a client may not be fully understood, particularly while trying to move through a crisis. Additionally, many sites reviewed are staffed by individuals who do not provide full disclosure of their professional training. Thus, while it may be apparent that someone has a graduate degree, the exact nature of the degree is not always clear and many sites fail to indicate that all counselors are appropriately licensed. Finally, it is questionable if any counselors are trained to offer services via e-mail or online chat sessions. Because these modalities are new to our profession few graduate training programs teach how best to provide such services and few provide supervised experiences working with cyber clients. Only a handful of sites ensure that their counselors have extensive consultation, supervision, and ongoing training.

Further considering common elements, online services reviewed clearly address a broad range of concerns appropriate for counseling services (element 4), a variety of modalities and approaches (element 6), and developmental, remedial, or preventative services (element 7). Element 5 states that counseling progresses through orderly, identifiable stages. The extent to which online services meet this criteria is currently unknown. Many such services are designed to be extremely short-term, often a single session. This is no different than the large number of clients who seek services and maintain only a single appointment. At times these services may be classified as consultation, education, or advice rather than counseling. In any event, the online service is likely not significantly different than many face-to-face single sessions.

The final common element specifies that counseling is tied to an identifiable knowledge base. Clearly, the knowledge base specific to online services is immature and growing. However, it appears that most of the online services being provided are tied to the broader domain of counseling literature. The developing base specific to online services is no different than the developing base of literature related to any new treatment modality. To the extent that these new procedures are developed as an extension of current practice and knowledge of the profession and are evaluated through accepted methodology, then the services meet the criteria established. This review suggests that online services can contain the elements necessary to be considered counseling.

If developing services provided online can be appropriately conceptualized as counseling, the next step is to determine if they display qualities necessary to be considered potentially efficacious. Previously, four process variables were identified. The extent to which these exist in the services that are offered online will provide some understanding about the potential these services offer.

The first critical counseling process variable is the therapeutic relationship. Such a relationship is built around safety and trust. Trust develops across time as two or more individuals share important information and have the experience of personal information being received and handled in a respectful manner. The relationship is put through a series of tests across time as the counselor demonstrates his/her worthiness and the client learns to be increasingly trusting.

Certainly sensitive information can be exchanged in an electronic format as readily as it can be in a face-to-face meeting. In fact, some authors have argued that it is easier to exchange information electronically because of the increased anonymity. The client does not have to face another person directly, thus reducing the potential risk of disclosure and giving the client an opportunity to edit thoughts prior to sending them to the counselor (Child Psychotherapist.Com, 2002). Others have noted that online counseling is appropriate for clients who are uncomfortable around people (Zelvin, 2002).

These very arguments, offered as benefits, may also remove online work from the realm of effective counseling described earlier. The ability to edit thoughts at great length gives the client the ability to carefully construct the relationship he or she wishes to have with a counselor, reducing the authenticity and genuineness of the input. Of course, clients in all counseling relationships may edit themselves and their disclosures, but in a therapeutic relationship there is an expectation that the client will increasingly live in the moment, experience the relationship as it exists, and respond honestly to the thoughts and emotions of the instant. In traditional service formats the counselor has the client's words as well as other verbal and nonverbal information to help understand the entirety of the client's communication. This information is integrated and interpreted, and when necessary, the counselor can confront the client about discrepancies. This process helps the client remain genuine and in the here and now and helps foster the relationship by experiencing the counselor as caring, respectful, and honest. Therefore, while a therapeutic cyber relationship has the potential to develop, it is clear that it will differ from the traditional relationship upon which current counseling theory and practice is built. How this will impact counseling outcomes remains to be seen.

The second important process variable is cognitive insight which is achieved as the client considers experiences in the counseling process as well as information provided by the counselor. E-mail, streaming video, and chat programs can all be used by a clinician to provide clients with feedback in an attempt to raise awareness. By providing an archive of all communication between the counselor and client, online services may have the added advantage of offering clients the ability to review exchanges, thereby decreasing the potential for misunderstanding and distorted recall. This aspect of the counseling relationship may actually enhance some exchanges and provide new opportunities for client growth.

While some benefit may be achieved, potential problems remain. One aspect of cognitive insight relates to clients ability to gain new insight into their impact on others and understand how others perceive them. By developing a relationship entirely mediated by computer-based text exchange, counselors do not have the ability to experience the client as others in the client's world do. Similarly, the client does not have the opportunity to experience the warmth and healing presence of the counselor. A smile, a nod, a light touch are all components of human exchange that cannot be experienced via text. This missing component may decrease the range of cognitive insight that clients are able to gain during online counseling. For those clients who focus on problems that can be represented entirely as cognitive distortions and are amenable to education and practice, this may not be a noticeable deficit. However, to other clients whose problems are more relational, or to counselors who operate with a greater focus on interpersonal exchange, this deficit may prove quite severe.

The third process variable identified is affective experience. The client must have the opportunity to not only appropriately acknowledge emotion, but also to experience emotion, create meaning, and express emotion in the context of a healthy therapeutic relationship. Tyler and Guth (1999) have argued that the experience of emotion is connected to operations in the preconscious experiential system as proposed by Epstein's Cognitive-experiential Self-theory (1994). The act of using a computer, of composing and typing text, is a rational process that is moderated by the conscious rational system. This dual processing theory suggests that clients cannot obtain the same level of affective experience or awareness when engaged in the rational act of operating a computer that is achieved when having the experience of creating a relational exchange directly with another human.

This proposed inability to achieve the same level of affective experience may be the single greatest deficit of counseling services that are mediated by computer. Counseling services that are premised on interactions that are highly educational, directive, and rational may be less impacted than services that are geared toward emotionally charged experience and exchange. While it is possible to imagine a cognitive-oriented counselor working with a client to learn thought stopping techniques online, it is harder to imagine a gestalt counselor working with a stuck client by focusing on experienced muscle tension and giving voice to the tension. Similarly, it is easier to imagine a client focusing on identifying appropriate career goals than on addressing overwhelming grief related to a significant loss.

The fourth and final process variable is related to client expectations. No studies have been reported in the literature to date that clarify client expectations for online services. Clients with previous counseling experience may expect to develop a relationship and exchange very similar to that which they have had in the past in traditional counseling settings. Other clients, without a previous history of counseling, may expect online services to imitate exchanges they have had in chat rooms or with e-mail contacts. As noted, the congruence of client expectations and client experience is very important to satisfaction and outcome. Because client expectations can vary considerably, building services based upon expectations is difficult. Further, since clients do not have expertise in what processes make counseling effective, relying solely on their expectations to create services is not likely to lead to the best possible service offerings. By helping to educate clients, counselors that provide online services can help to create appropriate expectations that can be met, and will thus improve potential outcomes.

Many sites reviewed strive to provide information for clients that will aid in the development of appropriate expectations. Most sites clearly define the manner in which communication is conducted and carefully describe the costs. A number of sites also offer cautionary statements describing limitations on services. These statements generally indicate that online services are not appropriate for individuals who are homicidal, suicidal, not in touch with reality, or dealing with issues of paranoia (see Brief On Line Therapy at http://www.briefonlinetherapy.com/cautions-pros-cons.html#limitations as an example). However, not all sites offer such cautionary statements and the range of concerns which online counselors state they can address is quite varied and includes many difficult concerns such as eating disorders, addictions, and impaired professionals.

Summary

Counseling, by its nature, encompasses a wide range of activities, is designed to meet a wide range of needs, and can take many forms depending on the clinician and needs of the client. In spite of this great diversity, a number of common elements have been found to exist not only in definitions of counseling, but also in aspects of the process itself which predict desirable outcomes.

Based on the definitions explored and the process variables advanced as necessary elements for effective services, it is reasonable to conclude that counseling can and is being provided over the Internet. Further, it appears that it is possible to provide services that are likely to have productive outcomes for at least some groups of clientele. For clients with certain concerns, particularly those that have limited access to services because of geographic constraints or other significant barriers, these online services offer a viable alternative.

The news, however, is not all positive. There remain a number of important issues that need to be addressed. These include appropriate training and legal oversight by the profession. Counselors with an interest in these services and educators who train them must immediately invest in expanding the knowledge base and creating opportunity to raise awareness and skills to the highest level possible. Where research provides evidence of appropriate technique, clinicians need to be aware and have the opportunity to be supervised in implementation. Where research is lacking, knowledgeable leaders must coordinate efforts locally and nationally to develop study teams and supervision groups to provide adequate oversight

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while others work to develop the research necessary to identify and then fill in gaps in our knowledge.

In addition, professional organizations must take a strong leadership role in educating counselors as well as consumers about this new array of services. Having developed guidelines for online counseling services (American Counseling Association, 1999), the American Counseling Association needs to continue efforts to disseminate these guidelines and proactively work with online service providers to ensure that they meet these minimum standards. Helping clients to have access to and understand these guidelines will assist clients in finding appropriate and ethical service providers.

Finally, everyone interested in mental health services, including professional organizations, non-profit agencies and foundations, government agencies, and the medical establishment, must work to create and fund a research agenda to facilitate this rapid growth in the application of technology to mental health needs. Currently driven by market forces, services are developing with a focus on revenue rather than client need. In the 1980's, for-profit acute care psychiatric facilities burgeoned into a multibillion-dollar industry only to collapse by the mid 1990's as reforms swept through the insurance industry, and these facilities were largely unable to justify their existence. Money spent now to understand the role of online services and promote clinician and consumer awareness will help to ensure that a viable, responsive, and effective professional industry develops.

In the following chapters, several online service providers will detail their services. These chapters will provide a more in-depth look at specific services resulting in a much richer detailing of services than the current chapter was able to provide. In so doing, the providers will be able to highlight the strengths of their services, as well as detail steps taken to address specific problems that were anticipated or encountered. As case studies, they provide rich data about the potential for online services. As you review these chapters, consider the issues raised in the current chapter. Do the services described contain the elements necessary to be considered counseling, or are they more limited in scope, perhaps better characterized as educational or consultative services? What steps have these providers taken to protect clients as well as clinicians? Most importantly, do these providers offer services consistent with their claims and responsibilities? Counseling services are indeed changing and the following chapters represent one look at the future.

Special thanks goes to Kelli McLeod and Nicole Jackson for conducting library research for this chapter.

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Chapter Eight

The Evolution of a Distance Career Counseling Model: Implications for Training, Practice and Supervision of Cybercounselors

James F. Malone, Karen S. Miller, and Randy M. Miller

Distance Career Counseling Program Overview

The distance career counseling program described herein was developed over several years by a multidisciplinary team of career counseling, technology and business development experts assembled by the authors who are the primary figures in the New York City-based organization known as ReadyMinds (www.readyminds.com). It is exciting to describe the current state of ReadyMinds as it exists at this writing (Fall 2001) since it reflects the fruits of our labor after many years of discussion and preliminary applications. Our program has been fully operational for one calendar year, but it is a continuous work-in-progress.

The field of distance and cybercareer counseling is evolving quickly, and ReadyMinds continually updates the program to incorporate knowledge gained from research and practice. This chapter examines and addresses issues facing cybercounselors, cybertrainers and cybersupervisors who have been actively involved in the design and delivery of the ReadyMinds program.

ReadyMinds provides personalized distance career counseling to a range of clients: undergraduate and graduate students as well as alumni seeking to make career changes. Our counselors employ a proprietary methodology and a structured program that maximize the use of real world resources. ReadyMinds helps clients focus on their current and future career planning and provides them with concrete career development strategies to help them achieve their goals. The program differs from open-ended counseling relationships in that it is a need-based approach focusing on more immediate goals. It is structured to allow both client and counselor to move quickly towards developing a plan of action.

The beginning of this chapter will depict the services provided to a typical ReadyMinds client. The following presentation is not intended to describe clinical or case issues, but merely to†illustrate the ReadyMinds process.

Imagine for a moment a male college student named Zach. He is home for the summer and working as a lifeguard. He wonders to himself, "When am I going to be able to get a REAL job? I'm getting pretty bored with this lifestyle." He thinks, "I know that I should be doing something to plan for my future, but when I'm at school I'm so busy that I never have time to consider what I will do after graduation. I can't even figure out my major let alone what I really want to do." One night he is at home surfing the Internet and he comes across ReadyMinds.com. He reads through the information presented and thinks, "Hey, maybe I don't have to wait until I get back to school in the fall to start some career planning." He talks to his parents about the fee and decides to register for career counseling through ReadyMinds (please see www.readyminds.com for an example of the registration process and current fee structure).

The journey has begun. Zach registers for the ReadyMinds program by choosing a login name and password. He then fills out demographic information. While registering, he is asked to read and agree to the ReadyMinds *Terms and Conditions of Use*, *Privacy Policy*, *Code of Ethics*, and *Client Waiver*. This task ensures Zach the opportunity to make an "Informed Consent" decision about the career counseling relationship to which he is committing. Once Zach has registered, he is asked to fill out the ReadyMinds *General Survey*, a comprehensive set of questions intended to help the ReadyMinds career counselor to obtain insights and background about Zach before the counseling begins. Zach also completes a standardized career assessment tool that has been validated for Internet use. This phase of the process allows the counselor to obtain valuable information regarding the client's expressed, measured, and manifest interests, skills, and values. Registration and assessment will take Zach approximately one hour to complete.

Imagine now that all of this information is floating around in cyberspace. To relieve any concerns about security, the ReadyMinds program uses a secure server that protects Zach's information from being readily available to any hacker on the Internet. The ReadyMinds Director of Career Counseling peruses Zach's profile and chooses the best ReadyMinds career counselor match from our current database of career counselors who have a National Certified Counselor (NCC) credential from the National Board for Certified Counselors (NBCC). These ReadyMinds career counselors have completed a 15-hour training course that prepares them to use their career counseling skills in a distance counseling model. The Director of Counseling chooses "Lisa" to work with Zach as his ReadyMinds career counselor because she has extensive experience working with college students who have yet to declare a major.

Lisa now has access to a wealth of preliminary information that will help her to anticipate Zach's needs before the actual counseling sessions begin. The process of developing rapport in this cybercounseling scenario now begins. Lisa has been trained in writing, research and assessment techniques to help establish rapport with Zach via e-mail. A powerful example of this communication is the ReadyMinds *Welcome E-mail* that suggests to Zach future areas for counseling discussion and describes the logistics for setting up the first session. Consequently, before Zach and Lisa even have phone contact, the working alliance has been initiated.

Next stop: Zach and Lisa "meet" over the phone. Through e-mail, Zach and Lisa have already arranged a mutually convenient time for their first telephone career counseling session. The first session usually lasts approximately 60 minutes. The ReadyMinds program provides clients with a total of 120 minutes of telecounseling time. During these 120 minutes, Zach and Lisa will complete a qualitative verbal assessment to further identify Zach's needs, strengths, preferences and values. These 120 minutes are usually broken down into two separate one-hour counseling sessions. The time in between sessions (in this case 3 weeks) is tailored to Zach's individual needs and reflects time needed to complete "career homework" as well as external factors such as exams and vacation schedules. Some clients prefer to have two 30-minute counseling contacts after the initial one-hour session. ReadyMinds career counselors are trained to assess how best to utilize the time available depending upon the unique needs of each client.

The ReadyMinds career counseling methodology is based on a compilation of traditional and distance counseling research. Lisa will apply a loosely structured verbal protocol and intentional education model to help Zach focus on motivation and goal setting. Zach's needs will determine where the initial focus of the counseling is placed. ReadyMinds views the career development process as being composed of specific steps that are interrelated and recursive. These four steps are to be viewed as a continuum and it is possible that Zach and Lisa might address issues that cross over from one to another during the course of an interview. However, it is helpful for the sake of focus to delineate these points of emphasis in the ReadyMinds career planning process. The following outline represents the approach to career planning: Self-assessment, Exploration, Decision-Making, and Self-Marketing.

Along this journey, Zach might need to make a stop to ask for directions. For example, in between his first and his second career counseling sessions with Lisa, he may think of an important question. As part of the ReadyMinds Program, Zach can e-mail his career counselor at any time with brief inquiries or requests. Hopefully, the answers to these questions will keep him from getting too lost in the forest.

Both during the counseling and upon the completion of the 120 minutes, Zach and Lisa will have outlined specific goals for Zach to address. However, it is also important that Zach has learned the four steps of the career planning process and can continue to apply these steps as they apply uniquely to his future career management. To reinforce this learning, the ReadyMinds career counselor prepares a 3-4 page written communication that is called *Insight Into U*™. This document is a personalized counseling summary that is intended to motivate and inspire Zach to continue working on his career plans. Additionally, this communication highlights Zach's career development process, provides feedback onhis career assessment and outlines the agreed upon goals and tasks for the future.*Insight Into U*™ is published on Zach's *MyReadyMinds*™ web site page that he accesses with his user name and password.

Zach's journey is far from complete; in fact, it is probably closer to the beginning than the end. Since ReadyMinds recognizes that Zach is likely to have many more questions along the way, Lisa will provide him with a list of important resources. Since Zach is a college student, it will be suggested that he explore the services available at his career services center. However, he will also be able to e-mail Lisa with brief questions for a full year. If Zach is interested in pursuing additional career counseling, he may take his *Insight Into U*™ to a career counselor on his campus or in his geographical area to serve as a guide or he may choose to continue to work with Lisa (for an additional fee).

Since many of the readers have a counseling background, we will address some of the additional components of the ReadyMinds program that are "invisible" to Zach. Lisa needs to effectively organize all of the information she has obtained from Zach in order to help him with his career plan. ReadyMinds has developed a unique system of note-taking that assists with this process. After each career counseling session, Lisa is expected to make specific notations regarding areas that she has covered in the qualitative developmental-contextualist assessment. This will not only help her to prepare for future sessions with Zach, but sets the stage for crafting *Insight Into U*™. ReadyMinds career counselors have access to experienced supervisors if they need assistance with any phase of the career counseling process. Supervisors provide support through telephone and e-mail communications. It is also appropriate to mention that ReadyMinds serves the needs of a wide variety of individuals that include: graduate students, alumni, continuing education students and career changers. These clients will register for the ReadyMinds program and will undergo the same counseling and assessment services experienced by Zach.

Chronological Development of the Program

Since 1997 ReadyMinds Founder and Chairman, Randy Miller, has worked together with career counseling, technology and business experts to develop a systematically delivered, high quality distance career counseling program to undergraduate and graduate college students as well as to alumni who are seeking to make career changes. He and his staff have focused on designing an integrated and personalized model of distance career counseling services that address the four steps in the career counseling process mentioned earlier. Counselor-assisted *assessment* of client interests, skills, values and contextual dynamics increases the individual's self-awareness. This insightful information guides appropriate research and *exploration* that help clients to employ informed *decision making* with respect to both educational and employment options. Where appropriate, strategies are planned so clients may engage in successful *self-marketing*. The ReadyMinds career counselor's role within this process includes providing insight, support and motivation by combining the best practices of traditional career counseling with carefully crafted and continuously evaluated distance career counseling interventions.

One of the factors that set ReadyMinds apart from other career counseling services is its use of technology. ReadyMinds' specific approach combines telecounseling with Internet-supported assessment and communication. Career counseling literature has been addressing computer-assisted guidance and career information dissemination systems for many years. More recently, the journals and additional publications have addressed cybercounseling as a newly developed specialty within the counseling field [e.g. Bloom & Walz (2000); *Journal of Career Assessment*, Vol. 8, (Winter, 2000). Harris-Bowlsbey, Riley Dikel, & Sampson (1998)]. Most of the literature has focused on philosophical, ethical, legal and efficacy issues while citing examples of initial pilot and exploratory ventures into this new field.

Indeed, the first edition of *Cybercounseling and Cyberlearning* summed up several "knowledge generalizations" (Walz, 2000, p.405) which urged a need for more research and suggested that the "caution and reservation" (Walz, 2000, p.407) applicable to distance learning ought to be applied to cybercounseling as well. Admonitions centered on the power of the Internet as a learning resource, albeit one not unlike the "Wild West" (Walz, 2000, p.407). Care must be taken to help learners and clients to develop effective computer skills. Especially inviting was the suggestion that cybercounseling might augment rather than replace traditional counseling. In a sense, the former could provide a context for qualitative research projects that will inform both innovative program design and promising guidelines for more rigorous empirical research studies about the effectiveness of cybercounseling.

Walz (2000) stressed the power of equitable information access through cyber resources and the counselor's role in brokering clients' abilities to find and use this knowledge towards achieving greater self-esteem and freedom, certainly two of the main goals we associate with effective counseling. Perhaps the most challenging point in this "summing up" section of the first edition was the call for counselors to "move out of the box" (Walz, 2000, p.410) in terms of learning what the outcomes of cybercounseling would be as new techniques and applications were made in working with clients within distance-based programs. The joining of cyberlearning and cybercounseling refers not only to the distinct activity of gaining knowledge, but also to helping clients effect positive changes in their lives. In an extended sense, as counselors engage in cybercounseling, they experience the need for retraining and new forms of supervision with regard to practice. What are the effects of engaging in cybercounseling for both counselor and client? How will practice further inform new training and supervision? What are the advantages and limitations of distance cybertraining? These generalizations further point out the implications for global and multicultural cooperation as well as joining the forces of counseling to related fields through the synergistic use of technology. The first edition's closing prediction is both powerful and futuristic. We know that cybercounseling is here to stay as a force within the field. While we adopt a commitment to its inevitability, we remain "half-sure" (Walz, 2000, p. 413), so that we may engage in the appropriate research to inform ourselves more accurately about it's efficacies and limitations.

In the spirit of allowing these "knowledge generalizations" to guide our work, the entire ReadyMinds team, made up of committed professionals from the fields of career counseling, technology, and business, have been working together to create, deliver, and evaluate the ReadyMinds distance career counseling program. The following pages examine the building of the ReadyMinds model and concurrently evaluate the effectiveness of its delivery by focusing on the emerging issues experienced by practitioners, trainers, supervisors, technical support staff, business managers and most importantly, clients.

Program Milestones

In 1997, when we began to formulate the program, several questions loomed. Who would our clients be? What would be their needs and which concrete career counseling services would best meet those needs? How would we source and train our career counselors? As a private company, how could we negotiate entry into the professional counseling world with credibility and acceptance? The following milestones represent important planning and implementation events significant in the development of the company.

PROGRAM MILESTONES

Date	Milestone
1997-Present	**Development of the *Career Counselor Training Manual*** - The Director and Assistant Director of Career Counseling began the preparation of a 15-chapter document outlining the rationale and procedures for the delivery of the ReadyMinds *Career Counseling Program*. The manual has been revised at several critical points in the development of the ReadyMinds program. Input and detailed evaluation have been received from several national career development experts.
1998-Present	**ReadyMinds Executive Committee** – This group provides a team effort to guide ReadyMinds on all strategic aspects of business and program development/delivery. It was assembled from a selected group of individuals who bring many years of business experience from various disciplines including marketing, finance, promotion/publicity and strategic planning. The group meets on a semi-annual basis and communicates on an as-needed basis.
July - August 1998	**Summer Case Study Program** - The objective of this pilot project was to field-test the ReadyMinds individualized approach to distance career counseling. Eighteen college students

	representing the ReadyMinds target market participated in the program and completed the entire course of counseling that was delivered by the Director and Assistant Director of Career Counseling. Students completed satisfaction surveys requesting a qualitative and quantitative assessment of the program. Exit interviews were conducted with participants to obtain additional detailed information about their overall experience with the program.
Jan - Dec. 1999	**Development of *Distance Career Counseling Model*** - Continued research and development highlighted the benefits of using a distance model to deliver ReadyMinds career counseling services. Already existing data suggested that clients would find telecounseling effective and convenient. Use of the Internet and e-mail would make it possible to hire a diverse pool of career counselors who could work from home-offices during times of their choosing.
April 2000	**Legal Code Development Process Begins** - ReadyMinds developed *Terms and Conditions of Use*, *Privacy Policy*, *Release of Information Waiver* and *Client Waiver* to ensure clients' informed consent about the use of ReadyMinds programs and services. Legal consultation continues to be obtained in order to ensure ReadyMinds' adherence to applicable laws and ethical codes.
May 2000	**First ReadyMinds'*Career Counselor Training*'** - Career counselors with national counselor certification from NBCC were trained to deliver the ReadyMinds program. Career counselors were recruited through referrals from colleagues and an advertisement in *Counseling Today* (monthly publication by the American Counseling Association).

June - December 2000	**ReadyMinds Soft Launch –** ReadyMinds offered its Career Counseling Program to a limited number of clients. This was an opportunity for our new counselors to deliver the distance model and it allowed potential collegiate partners to gain exposure to our services.
June 2000 - Present	**Technical Assistance Board** - National experts in the fields of career counseling, cybercounseling, career assessment and counselor supervision continue to work closely with the ReadyMinds career counseling, management and technical staffs in order to provide critical feedback as well as recommendations for program development and counselor training. This input reflects ReadyMinds' commitment to self-analysis as a means of delivering the highest quality services to our clients.
July 2000	**Partnership with Psychological Assessment Resources (PAR)** - In order to administer a well-validated career assessment tool via the Internet, ReadyMinds forged a partnership with PAR so that clients could take the Self-Directed Search© (SDS). When ReadyMinds clients take the SDS it appears as if they have never left the ReadyMinds website. There is no additional fee to the user for this assessment.
August 2000-Present	**ReadyMinds *Advisory Board*** - Since its inception ReadyMinds has sought to collaborate with and add value to the already existing professional career counseling services that exist on college and university campuses. Understandably the educational community is protective of its own valuable services and

	cautious about private companies who approach students to offer similar or related services. In order to familiarize the professional collegiate career development community with the caliber of ReadyMinds career counseling as well as to explore possible avenues of collaboration, the company initiated the formation of a focus group that eventually became our advisory board. This group, composed of top directors of career services from across the country, meets annually and communicates frequently on an as-needed basis. Emphasis is placed on ReadyMinds' offering of differentiated services to students and alumni that reflect each university's specific needs. Appropriately designed service menus and delivery structures enable each institution to decide how it would like to use the ReadyMinds program.
January 2001-Present	**School Partnership Launch and Implementation** –ReadyMinds administrative and marketing staffs confer with representatives of career services from various colleges and universities in order to explore collaborative relationships. Various avenues for joint efforts are explored: co-branding with career centers, private label arrangements, licensing fee for student service or product use, complementary supplemental services and private funding.
February 2001	**Human Resource Focus Group** – Committee of HR specialists from the business community shares ideas with ReadyMinds staff to explore the role industry can play in supporting and benefiting from clients who go through the ReadyMinds *Career Counseling Program.*
March 2001	**Career Counselor Training Program Receives NBCC Approval** – After a rigorous review of all aspects of the ReadyMinds *Career Counseling and Counselor Training Program,*

April 2001	NBCC grants approval to ReadyMinds as a continuing education provider. **Parent Focus Group** - ReadyMinds administrative and marketing staffs meet with parent focus group in order to discuss service models and develop offerings that will assist parents as their sons and daughters work their way through the career decision-making process in college.
April 2001	**Second ReadyMinds Career Counselor Training** – Additional certified counselors complete the ReadyMinds training program, receive their NBCC continuing education hours, and begin administering their training cases under supervision.
May – June 2001	**Response at the NACE (National Association of Colleges and Employees), SUNY (State Universities of New York), and EACE (Eastern Association of Colleges and Employees) Conferences** – As exhibitors at each of the above mentioned conferences, ReadyMinds received an overwhelming response and heavy traffic flow. Visitors were enthusiastic about utilizing the ReadyMinds program, not only for their undergraduate population, but for other sectors as well (i.e., graduate students, alumni, continuing education). Several introductions have since led to partnerships within the ReadyMinds *Collegiate Network*.
July 2001	**Third ReadyMinds Career Counselor Training**

The Program and How It Is Delivered

Earlier in this chapter, the case of Zach was discussed to illustrate the current ReadyMinds career counseling process. In sum, ReadyMinds delivers distance career counseling using a proprietary methodology that offers a structured program maximizing the use of real world resources. The program is designed to help our clients focus on current and future career planning needs and to provide concrete career development strategies to help them achieve their goals. The ReadyMinds process delivers 120 minutes of personalized career counseling via telephone that includes validated Internet-delivered assessment and online contact with a National Certified Counselor. Counseling feedback is provided to each individual and is integrated within a uniquely written summary called *Insight Into U*™.

The rationale for delivering ReadyMinds services in this manner will be discussed here. Adaptations in delivery have occurred throughout the process. For example, during the *Summer Case Study Program*, clients had to complete a *General Survey* via the U.S. mail or fax. All communications between client and counselor occurred by telephone, including scheduling appointment times. These completion methods were cumbersome and suffered from poor turn-around time. ReadyMinds administrative staff frequently had to follow-up with clients to request the return of information. Counselors found it frustrating since it often took multiple phone calls to make contact with a client. Consequently, ReadyMinds recognized the need to integrate a more efficient client-counselor communication system into its model. Using a password-based website and e-mail addressed some of the challenges in working with this population. Clients with irregular hours tend to access their e-mail more frequently than their telephone answering machines. Most ReadyMinds career counselors are independent contractors who work from their homes or home offices. Consequently, communicating by e-mail helps the counselor to maintain a measure of privacy.

We recognize that a distance counseling model is not applicable to all candidates for career counseling. It will be important for ReadyMinds to continually evaluate its impact on clients. The following questions should be considered important for future research and practice: What types of clients and/or problems seem to be served most effectively in a distance model? Does ReadyMinds provide services for clients who may not avail themselves of traditional career counseling services? Once clients have completed a course of distance career counseling are they more likely in the future to seek out additional counseling services (traditional or distance) when needed?

Our Client Population and Their Needs

At this writing, the ReadyMinds program has provided career counseling services to and gathered documented data from over 100 clients from twenty-two different states. The following describes some of the population demographics of ReadyMinds clients and includes a summary of the most salient needs and characteristics of our current population.

Close to three-quarters of ReadyMinds clients are female. This gender difference closely matches recent trends in college enrollment as well as the typical population which requests counseling services (Good & Wood, 2000). ReadyMinds serves an ethnically diverse clientele. Currently, 63% of ReadyMinds clients†have been Caucasian, 11% African-American, 9% Hispanic, 6% Asian, 4% Multiracial, and 1% American Indian (7% didn't report ethnicity). The geographic and ethnic span of our population indicates the need for ReadyMinds career counselors to be well trained in multicultural issues. Consequently, in its hiring practices, we attempt to locate career counselors from diverse backgrounds in order to best serve our clientele.

In order to understand some of the lifespan and developmental issues facing our clients, it is important to acknowledge their ages and education levels. Most of our clients are in their late teens or early twenties, however our client base ranges in age from 17-57. Over half of our clients are in their junior or senior year in college. A little over a quarter are freshmen or sophomores. Thirteen percent are in graduate school or have a graduate degree and five percent are in high school.

As previously mentioned, we view career development as a continuous process reflecting the steps of self-assessment, exploration, decision-making and self-marketing. ReadyMinds asks clients to rank order these needs. Our population selected *Exploration* as the highest career development need. The vast majority of our clients stated that they needed assistance with obtaining information about different career directions that would match their interests, skills and values. A close second included learning strategies for networking and information interviewing. This research suggests that while we serve a large number of juniors and seniors, these are individuals who continue to feel a need for assistance with the "nuts and bolts" of exploring career fields. In fact, this is the skill set in which most career counselors feel they are uniquely qualified.

The college/graduate school majors of our clients are as diverse as our clientele. We have clients majoring in everything from health care management to culinary arts. However, a few courses of study more highly represented include: Business/Finance/Marketing/Economics (31%), Communications/Visual/Performing Arts (17%), and Psychology/Counseling (13%). Knowledge of the most common courses of study helps us to effectively train, supervise and hire ReadyMinds career counselors.

The ReadyMinds *Career Counseling Program* is compact and concise, but it also attempts to obtain extensive information about contextual factors that affect an individual's career development. Career counselors generally find it useful to have information about parental background. In this area, our client population tends to be more homogenous. While a small percentage of our clients' parents are scattered through technical trades and clerical/administrative areas, the vast majority of our clientele's parents are college-educated professionals working in the fields of service, technology and business.

In order to more fully understand our clients' unique career development needs, we also attempt to understand internal and external career barriers, i.e., factors that might impede an individual's career success. Not surprisingly, barriers range from concerns about lacking specific skills, to needing money and financial aid, to having difficulty in a changing job market. However, a number of common internal barriers emerged among this population: self-confidence, general fear, fear of public speaking, confusion, inability to focus, and low motivation. Some of these barriers could be effectively incorporated into short term career counseling, while others clearly required additional counseling above and beyond the 120 minutes provided by the ReadyMinds program. Our career counselors must be skilled in quickly assessing whether any of these barriers are interfering with effective career counseling. If so, career counselors are required to refer these clients for personal counseling outside of the ReadyMinds program.

This provides a glimpse of ReadyMinds clients and what they hope to gain from career counseling. In turn, ReadyMinds career counselors expect that clients are available for scheduled career counseling sessions, are responsive to e-mails, and are engaged in the career counseling process. These factors will be more fully discussed in the sections on Ethical and Legal Guidelines and Difficult Situations.

Knowledge of our population demographics invites important questions for future research and practice. For example, are clients with certain types of majors more likely to seek distance career counseling services? Are various ethnic minority groups more comfortable pursuing the option of distance counseling than traditional face-to-face counseling? Does the relative anonymity of distance counseling encourage clients to seek assistance with career development earlier or later in their college career?

Career Counselor Population

Backgrounds, Competencies, Roles and Responsibilities

From the outset of designing the ReadyMinds program, our commitment to having the highest quality of counseling services for our clients guided the selection and preparation of our counseling staff. What criteria would guide us in choosing this select group? We determined that the minimum prerequisites for our career counselors would include a Master's degree in counseling, national certification by the National Board for Certified Counselors and a minimum of three years of supervised career counseling with individuals whose needs were similar to those of our clients. The National Certified Counselor (NCC) credential was especially important since we judged it to be the highest industry standard for our profession, and its attainment ensures the educational and experiential components we held to be important. Currently there are approximately 35,000 NCCs.

Additional consideration of our distance counseling model suggested that our counselors had to possess well-developed technology skills and effective verbal and writing skills since so much of our delivery system relies on these communication competencies. Considering the importance of motivation, goal-setting and targeted outcomes within the ReadyMinds program, we sought individuals with the attitudinal and organizational competence to deliver career counseling in a highly specialized and proprietary delivery system. Finally, the ability to handle a caseload skillfully and under a distance supervision model became a valued characteristic of our counselors.

Our current staff consists of 22 highly trained and experienced career counseling professionals from 11 states: California, Connecticut, Florida, Illinois, Louisiana, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania and Texas. The majority is currently working within the career development community at various colleges and universities.

How do we match up our clients and counselors for optimal case assignment? While they are all well trained career development professionals with highly developed skills in all phases of career counseling, we also engage in a differentiated staffing/specialty model of case assignment. For example, some of our counselors are experienced in assisting business or technical career-oriented students while others are more experienced working with clients whose special learning needs impact career decision-making. In making case assignments, the director and assistant director take these particular counselor competencies into account.

Questions often arise with regard to our counselors' business relationship with the company. Our counselors work for the company as independent contractors and their involvement is viewed as an additional professional responsibility that is handled outside of their employment hours and beyond commitments to their current employers. Some issues related to conflict of interest have initially arisen but in all cases our counselors have been able to work out these concerns. In most cases, our counselors' employers are aware of their relationship with ReadyMinds. In general, our counselors agree that they will not counsel any current or former students/clients who are associated with the institutions where they are currently employed. It has been gratifying that the professional quality and high ethical standards of the ReadyMinds program are recognized and respected within the career development community. Several colleges have developed an interest in the *Career Counseling Program* as a result of one of their staff member's involvement.

The Career Counselor Training Program

How did we respond to the challenge of training already experienced career professionals in our proprietary method? Hours of discussion and team efforts resulted in the initial decision to create the *Career Counselor Training Manual*. Our intent was to write not only a clear and comprehensive outline of our career counseling model but also to craft a curriculum for training our counselors to master and deliver a distance career counseling program. This publication outlines the rationale and procedures for the delivery of the *Career Counseling Program*. The manual has been revised at several critical points in our program development, usually in response to issues encountered in practice. Manual content addresses training and practice concerns discussed throughout this chapter. These issues include: the ReadyMinds philosophy and proprietary model of distance career counseling, human resources topics within ReadyMinds, theoretical and research support for our career counseling model, counseling products and services, and finally, supervision and evaluation.

The *Career Counselor Training Program* meets for 15 hours on two consecutive days at the New York City corporate offices. This face-to-face learning event makes use of the case study method with ample discussion time built into various presentations. Our training team is composed of the director and assistant director of counseling as well as our technical staff. Our current model was redesigned from two previous training programs that took place in different formats. Initially we met with trainees in a four session model: two extended evening meetings joined to two full Saturday sessions over a 6-8 week period. Getting busy professionals together provides for challenging logistics, and we initially felt the use of evenings and weekends would be more convenient. However, we found the flow and synergy of the training could be increased by structuring it into a consecutive two-day model. Admittedly, there is a great deal of material to be covered and assimilated in such a concentrated time period. We are pleased with the current format but are still exploring additional ways of easing the informational flow to the trainees. We already send out a substantial pre-training document a week to ten days prior to training. We are considering the possibility of including additional "up front" materials that could be worked on prior to the actual training session. ReadyMinds is also exploring the design and delivery of training using a distance learning model. Every newly trained ReadyMinds career counselor completes a training case under supervision immediately following the training sessions. No actual cases are assigned until the completion of the training case.

All training materials and delivery systems are carefully evaluated by trainees and internal staff with the intent of constantly upgrading the effectiveness of the program. ReadyMinds training carries with it 15 hours of approved continuing education credit towards the renewal of the NBCC certification credential and we maintain all records as per the NBCC Approved Continuing Education Provider Policies and Guidelines.

Ethical and Legal Guidelines: How ReadyMinds Conducts Business

From the outset of designing the ReadyMinds *Career Counseling Model*, adherence to the highest level of ethical and legal behavior in the interest of our clients and colleagues has guided our actions. As a private company offering career counseling services to individuals associated with the educational community, we want to create high expectations for client as well as counselor behavior. The challenges of prospecting for counseling talent and attracting clients to our program carry an imperative to conduct ourselves from an informed legal and ethical base. This need is especially profound since we are traveling relatively new terrain, or to repeat Walz's metaphor, the "Wild West" of the Internet.

With respect to ethical guidelines, we immediately established a ReadyMinds *Counselor Code of Ethics* that embraced the NBCC Code of Ethics and The Standards for the Ethical Practice of WebCounseling. ReadyMinds career counselors sign an ethical code statement that commits them to place client needs at the forefront of practice. This code also clearly delineates their responsibility to observe the differences between developmental career counseling and more clinical types of counseling. Our training program goes into great detail in order to illustrate this distinction, and it demonstrates how to handle sensitive issues such as making a referral for psychotherapy or intervening in "harm to self or others" emergencies.

From the client side, we also felt that it was necessary to elicit a signed agreement that provides informed consent to those who receive career counseling from ReadyMinds. The ReadyMinds *Client Code of Ethics* is a very detailed statement that clearly defines the scope and nature of the career counseling provided in the ReadyMinds program. Clients agree to respect the privacy and proprietary rights of the company as well as to uphold their own responsibilities. These duties include: being available for appointments at assigned times and conducting themselves as mature, socially responsible adults throughout their relationship with ReadyMinds. Not unlike traditional face-to face counseling, some clients miss appointments or fall by the wayside. Although it is a relatively small percentage of our clients (approximately 11%), we make a strong and concerted effort to reengage them back into the program.

Extended contact with our company's legal advisors also resulted in a detailed *Privacy Policy* and *Terms and Conditions* Section on our website. The latter contains a direct link to the NBCC website in the event that clients want to ask questions about the content and delivery of the career counseling we provide.

An additional example of commitment to client privacy is how we handle *Directory Information* that refers to identifying data such as addresses and phone numbers. Many institutions consider this information "fair game" for distribution to third parties and will exercise this option unless a student "opts out" and tells the institution not to share the data. ReadyMinds offers the opposite. Upon registration we inform our clients that they must "opt in" if they approve of their information being passed along to a third party. Unless they do so, ReadyMinds will not share their directory information with any third party. We have also created a *Release of Information Authorization* form in case a client would like some type of career counseling report to go to a third party such as a career services counselor on campus. A *Parental Consent Form* is required in the case of a client who is not yet 18 years of age.

Significant planning went into a legal agreement addressing human resources issues that is signed by each newly trained counselor and the CEO. This document offers protection to both sides with regard to proprietary information, non-disclosure/non-compete agreements, compensation, workflow expectations, professional liability insurance and a wide variety of other important issues. Since our career counselors work as independent contractors, the company assists their access to professional liability insurance through the ACA Insurance Trust. However, they must pay for this and other work related expenses since the company is not permitted to offer them benefits. A significant component of the ReadyMinds *Training Program* is devoted to clarifying these mutual obligations and responsibilities. In all discussions both sides have maintained a very professional and respectful attitude in doing business with each other for the benefit of our clients. Clarification of the business relationship has been beneficial since many counselors have not had extensive experience working outside the educational community.

Collaboration with Colleagues: Adding Value to Existing Services

Offices of career development in academia clearly offer well-organized and comprehensive programs of career planning to their students and other constituents. Indeed the director and assistant director are career academics that have spent more than 40 years as counselors and counselor educators in higher education. At the same time, we are very aware of the current and emerging needs for certain learners to access distance career counseling services. Examples are individuals who would enjoy the convenience of this counseling outside the times when it is usually available via traditional business hours. Certainly alumni, continuing education students, and distance learners can also profit from our service. Individuals who live in remote locations where easy access is not available comprise another group.

The Internet revolution has also spawned a population that both enjoys and prefers the communication style which distance career counseling provides. Considering the tens of thousands of websites offering career information, research data, and job posting access, it makes sense to offer supplementary counseling services that integrate and hold the process together for individuals as they attempt to wade through the many options available in the cyber landscape. Whenever a client is a college student, ReadyMinds counselors make it a practice to visit the web site of that university's career services office. They also refer these clients to that career services office and web site at several points during the career counseling process. This type of referral and reinforcement is just one example of how ReadyMinds seeks to add value to already existing services.

The challenge of gaining a respected and accepted position within the college career counseling space has been both delicate and exhilarating. Over a four-year period, the founder and management team have made a conscious commitment to serve this community and its constituents. Through its work with our advisory board, composed of ten directors representing college and university career services from across the country, as well as by joining NACE and attending its national conference, ReadyMinds has successfully developed a collaborative relationship with the career services community. We are currently offering our program to individuals from several colleges and universities and intend to focus our services towards those populations that will benefit most from a value added resource.

Luzzo (2000) presents statistics about the changing demographics of today's college population. He cites references indicating that many current students (undergraduates and graduates) are returning adults over 25 years of age. These individuals typically have not been enrolled in a formal educational system in many years. Furthermore, Luzzo (1999) suggests that this "adult" population will probably continue to grow and expand over the next several years. Our advisory board feels that many college and university career counseling programs focus almost exclusively on the needs of traditional-aged undergraduate students. However, recent demographic trends indicate a need to respond to the expanding returning adult student population (Luzzo, 2000). The ReadyMinds program is in a unique position to serve this growing population as well as alumni and distance learners.

Various partnership or vendor relations models have been discussed such as "co-branding" or "private labeling." We also seek to broker communication between our clients and their campus career services counselors in those instances where clients would like to receive follow-up counseling from this source. In all cases, we recommend in our counseling summary to our clients that they also explore campus-based career counseling and the career services web site of the institution they attend as we seek to establish and maintain a degree of professional service and positive vendor relations with other career services professionals within the educational sector.

Distance Career Counseling and Technology Services and Products

Our distance career counseling incorporates telephone counseling supported by e-mail and our web site. Clients have access to a personal web page, called *MyReadyMinds™* that can be updated by the career counselor as clients navigate their way through the career development process.

These unique forms of communicating with clients are a natural result of the logistical realities surrounding our program as we serve clients from a wide geographic span (currently, anywhere in the United States). In the past, telecounseling was typically offered to individuals who would otherwise be unable to receive counseling because of living in a remote location, disability, or lack of access (Coman, Burrows, & Evans, 2001). However, having the ability to obtain career counseling services by telephone also adds a level of convenience for many individuals. Some university based career centers are not open evenings, weekends or during college recess, typically the time when clients may be available to receive services. Many ReadyMinds career counselors are interested in working with clients during "off hours" since this arrangement allows them to continue to earn additional income while maintaining current employment or family responsibilities.

The telephone was selected as the medium to deliver career counseling after carefully considering the relevant research. Previous studies found the types of concerns that typically occur during career counseling could likely be effectively managed through telephone counseling (Day & Schneider, 2000). Research has also demonstrated that the telephone has been successfully used to provide a number of differently structured counseling programs (Rosenfield, 1997). Consequently, we recognized the benefit of creating an organized, structured career counseling program in order to maximize the chances of successful career counseling outcomes. Coman, Burrows & Evans (2001) suggest that preplanning of sessions, and if necessary, e-mailing material in advance of the counseling session will be helpful. We have pre-planning automatically built into our program and a career counselor can easily direct a student to view information on the Internet prior to a counseling session through the use of technology built into our web site.

Counseling by telephone has a number of significant benefits. Increased client access to services has already been mentioned. The relative anonymity of telephone counseling can be an important advantage. For example, clients who are well known in a small community may have difficulty feeling comfortable seeking face-to-face counseling locally (Coman, Burrows, & Evans, 2001). It has been found that certain clients may be reluctant to divulge certain types of problems in person. However, the telephone often provides clients with a perception of distance and safety that allows them to more quickly reveal their true concerns (Day & Schneider, 2000; Rosenfield, 1997). For example, our career counselors often find that clients are more willing to discuss occupational daydreams that may not be "acceptable" to authority figures in their lives. This generally leads to a fruitful discussion of work values, nontraditional career paths and overall life planning.

Rosenfield (1997) describes many of the skills and attitudes needed for effective telephone counseling and we have incorporated these into the *Career Counselor Training Program.* Some characteristics include: having a highly interactive type of counseling style which includes responding quickly, briefly and frequently; building a high level of structure into the counseling; not allowing for long silences (silences tend to feel longer over the telephone than in person); and frequent summarizations.

The career counseling program also incorporates written communications into its work with clients. Our career counselor must be skilled in the "art of sending e-mails" as well as delivering a thorough written report. Career counselors are trained to send written communications that help them to develop rapport with clients as well as to deliver information. The program has received feedback from a number of clients indicating the importance of these initial communications. For example, one client wrote, "Thank you for writing that email to me. It actually makes me feel like someone's listening!" Collie, Mitchell and Murphy (2000) and Boer (2001) provide a starting point for helping counselors learn how to communicate effectively and empathically with clients in cyberspace. Some suggestions include: making one's writing style more conversational and less formal, using emoticons [:)] to express emotion and convey playfulness, and using similes and metaphors when appropriate. ReadyMinds incorporates these concepts and others into its training program and materials.

Many of the concerns which beginning distance career counselors have focus on the lack of non-verbal communication. Clearly, clients and counselors are not able to examine or respond to body language and facial expressions. This reality requires adjustments by both counselor and client. Most counselors have been trained to attend to non-verbal cues and consider this skill to be an important tool in counseling. However, telecounseling research suggests that most counselors effectively adapt to the new media with less difficulty than expected (Rosenfield, 1997; Day & Schneider, 2000). In fact, our career counselors further support this finding and have indicated that they find themselves paying greater attention to voice tone, speed and inflection due to the lack of non-verbal cues. These fluctuations in style often provide them with information similar to that which they would obtain with non-verbal cues. They have also learned to be more explicit in checking out how clients are reacting at various points within the counseling session.

The technology associated with distance career counseling can sometimes be complicated. Our training manual has an entire section devoted to technology. During a telecounseling session, our career counselors are asked to turn off their call-waiting systems. However, only the party initiating the telephone call can turn off this system. Counseling sessions may be interrupted by call waiting on the client end. Using speakerphones or cordless phones sometimes provide poor connections. Caller-ID presents a 21st century challenge to the cybercounselor.

Our career counselors must be willing to check e-mail daily since e-mail is the primary communication mechanism among our staff and clients. When servers are down or computers are being fixed, communications can be delayed. While it may seem that "lost in the mail" is an outdated term, occasionally e-mail messages get "lost in cyberspace." Most of our career counselors and clients find e-mail a quick and convenient way to communicate, but at times there are frustrations. For example, if a client doesn't respond to an e-mail, how does the counselor know whether the e-mail has been received and read? We suggest that all career counselors request "confirmation receipts" but not all e-mail systems are equipped to carry out this functionality, and there are ways in which clients can circumvent sending a receipt even if they have read the e-mail message.

The final outcome of the program is *Insight Into U™*. The intention behind the design of this electronically communicated counseling product is to provide clients with a personalized synthesis of their career development counseling process as experienced with their career counselor.

Insight Into U™ provides career assessment that is both informed by counselor commentary and linked to appropriate exploratory/research resources. It intends to offer both genuine support and meaningful motivation to clients in order to keep them committed to their own career development process. It was originally delivered in the form of an audiotape. However, in the interest of using effective technology to serve better counseling communication, *Insight Into U™* has evolved into a four page personalized format that is posted electronically on a client's *My ReadyMinds™ Website* page. Creating this document requires the career counselor to be skilled not only in written expression, but in word processing and other related computer skills. *Insight Into U™* is "published" to clients' *My ReadyMinds™ Website* page via series of technical directives from their career counselors' offices. Consequently, counselors need to have a computer system that is able to save documents as webtext as well as regular text.

Technology is an integral part of our program and it generally supports effective communication. It is important to hire counselors with an already advanced level of technical skill, but it is equally as necessary to have staff available to troubleshoot technology-related problems since it is often difficult to determine when technology issues reside with a specific computer, an Internet service provider, or human error.

Technology updates in our program are the norm rather than the exception. Currently, revisions are delivered via e-mail, but in the future

ReadyMinds will create a ReadyMinds staff listserv. This suggestion was made by various counselors during a training program and could serve as a more efficient way to quickly share information.

Career Counselor Supervision Model

The importance of supervision is acknowledged not only in maintaining the best possible quality of career counseling but also in providing support to our staff. Working in a distance model can be lonely and isolating, entailing similar problems with burnout that may occur when a counselor is working in private practice. Our supervisors have extensive career counseling experience and must have provided direct service to clients in the past. Currently, the Director and Assistant Director of Career Counseling (the first two authors of this chapter) provide supervision. We have developed supervision criteria that guide the counselor evaluation process. We continually evaluate the following skills and abilities: skilled handling of caseload, quality completion of all ReadyMinds written communication, delivering customer satisfaction, and maintaining timely and efficient communications with ReadyMinds.

Supervision in our program occurs via e-mail and telephone. Upon signing an agreement to become an independent contractor with ReadyMinds, counselors are asked to complete a "training case." This post-training supervision requirement emerged during the training of the second group of career counselors as we recognized the complexity of asking our counselors to organize their counseling ideas within our highly systematized and structured program. This process is similar to the one used in graduate counseling training programs. Career counselors are asked to recruit a volunteer client who will participate in all aspects of the program. This continuation of training gives our career counselors an opportunity to practice their skills in a supervised, low-pressure situation. There is a formal supervision protocol for the training case as well as for the first two actual clients. This supervision experience entails e-mail or telephone contact at various steps in the process. In general, in unambiguous situations or when disseminating information, e-mail is the preferred contact method. However, when either the supervisor or the career counselor feels an issue requires discussion, the telephone is the appropriate contact mechanism. After the first two client cases have been completed, career counselors can request supervision at any time during their course of career counseling with clients. Quarterly, supervisors may select client cases for review, and written documents will be reviewed for form and content on a random or as-needed basis. Formal performance evaluations take place semi-annually.

On-going supervision needs have varied depending on the strengths and weaknesses of the career counselor. The following list describes the main issues which have occurred in Ready Minds distance supervision: Does this client need personal counseling in addition to career counseling; Assistance with communication styles (reticent or very talkative); How to handle clients who miss scheduled appointments; Editing written documents; and Obtaining reputable resources for unusual career paths. ReadyMinds Supervisors have found that the majority of supervision issues are typically related to this "new counseling format." Our career counselors are highly skilled in their area of expertise. However, few of them have been called upon to provide either telecounseling or extensive written communications as part of their previous employment. Most of our career counselors adapt easily and quickly to the use of the telephone. However, counselors have encountered more difficulty in the challenge of quickly preparing lengthy written documents. While in the past career counselors may have kept private counseling notes or had to prepare brief reports, the ReadyMinds Process entails regular on-going written communications. Consequently, at the beginning of career counselors' tenure with ReadyMinds, supervisors may spend more time editing and revising written documents until the career counselor becomes more skilled and at ease with this new task. Occasionally, there are more difficult or complicated cases that require supervision. Generally, these cases are handled on an individual basis. However, recognizing that many common problematic situations will arise more than once in the course of our program, we have outlined in the training manual a series of difficult counseling scenarios along with potential response strategies.

Directions/implications for future practice and research in supervision will emerge over time. Currently, our career counselors appropriately request supervision when they encounter challenging or unusual cases. Counselors know they can access supervision within a 24-hour timeframe. As previously mentioned in the section on distance counseling, the implementation of a listserv may further promote on-going supervision.

Resolution and Solution of Difficult Counseling Situations

The Training Program and Counselor Training Manual are designed to help our career counselors be prepared for and aware of some common problematic situations which may arise during career counseling. Additionally, there are certain clinical emergency situations that rarely emerge, but require immediate intervention. Most agencies have emergency protocols to follow and ReadyMinds has taken care to prepare a suicide/

homicide/harm to others intervention plan which can be effectively used in a distance counseling model.

The most common difficult situation occurs when a client fails to make contact with our career counselor. In this case, the client has fully registered for the program, but either doesn't respond to e-mails to set up counseling appointments or the client isn't available at the time of a scheduled counseling appointment. Counseling organizations have different philosophies and policies on handling "no-shows." We request that counselors make two attempts at establishing contact before contacting a supervisor. Contact failures are frustrating but may be the result of a variety of factors including: low motivation, technology, or a poor understanding of how our program operates. Taking these and other individual factors into account, a supervisor may direct a career counselor to re-attempt contact or may request a follow-up communication from corporate offices.

Other examples of difficult situations include: a client's counseling needs being more clinical than we can address, a client is dissatisfied with the career counselor, or a client's parent makes an inquiry or complaint. In each instance, we have a response strategy that usually involves a supervisor in the decision-making process. All difficult situations and supervisory contacts are documented on our career counseling forms.

One of the most challenging counseling events occurs when a client expresses suicidal or homicidal thoughts or plans. When a counselor works within an institutional or agency setting, there are usually colleagues to call upon for a second opinion as well as security officers to assist with management. However, in the world of distance counseling a counselor needs to be well prepared to assess the severity of the problem quickly and skillfully. Since all our career counselors have national certification, it is expected that they have a general understanding of crisis intervention. In addition, we have prepared an intervention plan that assists the career counselor in deciding how to handle a client presenting an emergency situation. We provide career counseling and in our code of ethics it clearly states that our counseling is "not designed to assess or treat clinical issues." Consequently, this situation is not likely to arise but we want our counselors to be prepared for any eventuality. As in most crisis situations, it is imperative to protect the health and safety of the client and other individuals if there is a strong probability of harm to self or another. As part of the preparatory work ReadyMinds career counselors obtain telephone numbers for the university counseling center and campus security when working with a university student. This preparation is crucial when managing a crisis situation. When working with an alumni or a client who is not on a university campus, obtaining numbers for local emergency services can be more of a challenge. Our career counselors are provided with a national "1-800" crisis hotline number as part of their training.

ReadyMinds has not encountered a large number of difficult situations. However, it is important to keep track of the problematic scenarios that emerge in distance counseling because these will influence future program design and development. For example, it has been suggested that college career counselors may tend to refer very difficult cases to our program. ReadyMinds may not be qualified to work with every client that enters our virtual doors. How do we sensitively and ethically refer clients to more appropriate services when necessary? Do we risk alienating our referral sources when we don't accept all clients? ReadyMinds will face challenges in balancing client and corporate needs as it expands and grows.

Program Evaluation, Client Satisfaction and Counselor Feedback

During the summer of 1998 the director and assistant director conducted a pilot study and action plan delivery of our model, as it existed at the time. While the model has changed to some extent in both content and delivery since then, this initial study established and set the standard for seeking as well as measuring client satisfaction. We sought then, and continue to seek now both quantitative and qualitative responses to very specific questions about the content of our program and the helping efficacy of our counselors. Our vehicle for obtaining this valuable feedback is a 10-item Likert-scale questionnaire that solicits measured responses about the effectiveness of all ReadyMinds program components. It also asks for responses to evaluate career counselor behavior. In addition, the questionnaire provides space for qualitative statements from clients that address helpful and effective aspects of the program or any areas in need of improvement. Initially, these questionnaires were sent and returned through the U.S. mail. In the last few months, these questionnaires have been placed on-line and are filled out electronically and anonymously by clients after they receive their career counseling summary (*Insight Into U™*).

Many clients have made generous and enthusiastic comments about the effectiveness of the program. A thematic analysis of these written evaluations suggests our clients enjoy the following benefits:

- Career counselors take their time to really become acquainted with their clients and their needs.
- The written surveys and career assessment resources are very effective in providing the career counselor with "up-front" information about the client.

- The career counseling process is convenient and friendly in an informal way. Yet, it is systematic and structured enough to be very effective in helping clients to reach their goals.
- The web-based communication and written action plans are helpful in understanding the results of the career counseling sessions.
- The program helps clients to translate their self-assessment information into concrete career fields.
- Career counselors provide genuine support in the process.

Here are some actual testimonial comments offered from our clients:

Jeff Dolan, Senior - University of North Carolina at Chapel Hill, July 2001

"I definitely enjoyed my experience with ReadyMinds. It not only was convenient and casual, but also focused me on my career goals and helped me understand more about what I value in a career. I would highly recommend the program to any student or professional seeking his/her next step in his/her career. The counselors were all eager to help and give insightful advice, as well as encouragement. The web site (Insight Into U) that summarized our conversations was one of the greatest parts of the program. Thanks for a great experience, and I will look forward to carrying out the plan I laid out with my ReadyMinds Counselor."

Marcela Sabino, Junior - Amherst College, March 2001

"It was helpful to talk to a 'real counselor' who knew a lot about the college process and up-to-date information. I really have to emphasize the accessibility and the easygoing character of my counselor."

McCord Fitzsimmons, Sophomore - Rutgers University, February 2001

"The ReadyMinds process is a relatively painless one. ReadyMinds begins with registration on their website. The entire online information gathering session takes about 45 minutes. ReadyMinds counselors are extremely flexible in meeting the demands of often time's hectic student schedules. ReadyMinds counselors are available in the evening and even on the weekends. This turned out to be very convenient in my own personal experience with this service.

My personalized counselor called my dorm room and we discussed my own career goals, as well as my career concerns. We also discussed interviewing techniques, as well as job hunting strategies. Throughout the entire process, I found my counselor to be helpful, understanding, and genuinely caring toward my particular circumstances."

Lashawndra Price, Graduate Student - The University of North Carolina at Chapel Hill, January 2001

"I think the program was very good. I think it is especially good for someone who can't meet during traditional office hours. I spoke with my counselor at times when school was closed (after Thanksgiving and just before Christmas). This could not have happened if I had been only using UCS (career services) on campus. I also feel that the program, ..., did very well helping me, a graduate student looking to transition out of the academy. I felt comfortable with my counselor and with the advice and suggestions she gave me. The program that they offer is stellar. The feedback that they provided through Insight Into U™ and appropriate website links were great too. Overall, this program is really great and I would highly recommend it to graduate students and undergraduates."

Rachel Daniels, Senior - The University of North Carolina at Chapel Hill, January 2001

For me, the most helpful part about ReadyMinds was that my counselor was able to give me suggestions for 5 or 6 types of careers I never even knew existed. I am in the process now of investigating those, and though I haven't reached a decision yet about what to do next year, I feel like whatever choice I make will be a much wiser one than I would have made on my own."

Shamel Farley, Junior – Cornell University, August 2000

"Before I joined the ReadyMinds Program, I knew I wanted to become a lawyer. But what fields of law I wanted to enter was undecided. Along the course of the program, I was able to do some research on the different areas of law. I have now narrowed down my choices. Another aspect of the program dealt with looking at my strengths and weaknesses. It is truly amazing to look at your strengths and to be able to pinpoint the weaknesses and work on them."

In some cases clients have pointed out perceived shortcomings within the program. These usually center on the desire to have had a greater amount of time, more than the 120 minutes, for career counseling. In all cases when counselors or supervisors become aware of any instance of client dissatisfaction, we examine the issues and strategize to make any possible improvements.

During supervision and at regular intervals, the director and assistant director of career counseling seek feedback commentary from our counselors. We want to know what issues they are facing, how adequately their training prepared them for delivering distance career counseling and what contribution their experiences may offer to new or other practitioners of cybercounseling. It is revealing to find out how many issues and difficulties associated with face to face counseling also occur in cybercounseling relationships. Here are some selective and informative voices from the field:

- "Cybercounseling is an active, evolving process and, even though our guidelines are well outlined, surprises happen."
- "Ongoing case supervision is invaluable to the cybercounselor... I foresee continuing supervisory contact because it fosters my own growth and development as a counselor."
- "Although initially it seems unusual not having face-to-face contact with a client and therefore missing out on the 'non verbal' component of communication, it is a type of counseling one can certainly become comfortable with."
- "Naturally there are sometimes unavoidable technical obstacles that get in the way."
- "It is easy for our clients to avoid appointments, as well as not follow through with mutually agreed to tasks. They can decide to not answer e-mails or skip phone appointments."
- "With regard to supervision...there has been abundant support. I have always felt confident that when situations arise, ...I get a prompt reply by e-mail and/or phone."

We also have formed a very interesting and unanticipated impression with respect to the relationship between clarity of communication and clarity of counseling as a result of our *Distance Career Counseling Model.* The focus of this new awareness has to do with the differences between the spoken and the written word. Several of our counselors have pointed out that their clients appear to be more self-aware and in touch with the specificity of their career counseling needs than face-to-face clients, perhaps resulting from completing a fairly extensive questionnaire at the beginning of their counseling experience. In like manner, our counselors read sometimes very extensive self-disclosures from these documents. As a result of organizing in-depth counseling notes and crafting a detailed counseling summary in writing, our counselors frequently feel there is more examination of and reflection upon counseling dynamics, strategies and outcomes. Is it possible that cybercounseling and other forms of distance counseling are in some ways increasing the concreteness and specificity of the counseling process due to the more intense relationship among the communication dynamics of speaking, reflective thinking and writing. Is the power of the written word, even in its electronic expression, compensating in some ways for what is lost in comparison with traditional face-to face counseling?

Summary and Conclusion

Hopefully this chapter has provided insight, inspiration and encouragement to counselors, institutions, and other organizations that are interested in or already practicing some form of distance/cybercounseling. ReadyMinds has worked hard to create and deliver a high quality program for its clients and the following aspects of our program deserve highlighting:

- Structured and systematized distance career counseling model
- Focuses on personalization and relationship building
- Provides flexible, private, and convenient services
- Leads to the creative use of counseling technology
- Adheres to ethical and legal guidelines and ensures confidentiality
- Fosters motivation and attainment of career counseling goals

In developing the ReadyMinds *Career Counseling Program*, teamwork has been a guiding principle. In a project such as ours, counseling intersects with technology and business. Where contradictory ideas occur, we have found that our thoughts and actions are continuously directed towards what is most beneficial to our clients. We intend to continue playing a vital and meaningful role in the continued development of systematic career guidance and distance career counseling.

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Chapter Nine

Testing and Counseling: A Marriage Saved by the Internet?

W. Paul Jones

Some three decades ago problems in integrating counseling and testing services led a pioneer in counseling appraisal to describe the combination as a "marriage that failed" (Goldman, 1972). A comparable theme was evident two decades later in an American Counseling Association symposium revisiting the concerns (Goldman, 1994).

The premise in this chapter is that a more optimistic view of that relationship is warranted in the new century. It may in fact be reasonable in the very near future to suggest one more visit to the marriage metaphor, this time with a title "Testing and Counseling: A Marriage Saved by the Internet."

This optimism does not presume that the online modalities for assessment have magically resulted in better tests or even better use of available tests. With perhaps the singular exception of the opportunity for broader accessibility to assessment tools, administering and interpreting tests online thus far seems more closely associated with new issues and the inconvenience of periodic technical breakdowns. As Wall (2000) so aptly described it, there are lots of rocks (for example, concerns about confidentiality/privacy, test instrument quality, and test taker identity) interspersed among the diamonds in online assessment.

The optimism rests instead on the fact that learning how to conduct counseling and testing sessions online has encouraged, if not forced, stepping back to reexamine exactly what we are trying to accomplish through integrating the two. Our training programs have typically emphasized the differences between these two applications, but in confronting the task of substituting computer-mediated communication for face-to-face interactions, it is evident that the features in common far outnumber the areas of difference. A satisfactory "marriage" between counseling and testing may not only be possible; it may be inevitable.

Before examining this premise in more detail some definitions and boundaries for this chapter are needed, guided by the taxonomy for service delivery from the *Standards for the Practice of Internet Counseling* provided by the National Board for Certified Counselors (2001). Technology-assisted distance counseling, as opposed to face-to-face interactions, is first divided into two categories: Internet Counseling and Telecounseling. Applications of Internet Counseling are then further categorized as e-mail-based counseling, chat-based counseling, and video-based counseling.

A brief examination of an application combining some elements of both telephone-based (POTS or plain old telephone service) and online resources is included at the end of this chapter, but the primary focus will be on integration of testing and counseling via the Internet. Advantages and concerns related to both e-mail interactions and chat and/or video-conferencing will be considered.

What to call the online services remains in some dispute. Internet counseling, e-counseling, e-therapy, online therapy, and cybercounseling are among the many descriptors found in the literature. *Cybercounseling* will be consistently used in this chapter to identify e-mail, chat, and video delivery of online counseling services. The term is descriptive, increasingly evident in the literature, and of course consistent with the title of this book.

A comparable question exists in whether to identify the focus of this chapter as assessment, testing, or appraisal. The process is more often identified as assessment in the current literature; testing is the term with the longer history; and appraisal has strong roots in the counseling profession. Unfortunately (or fortunately) the term *cyberappraisal*, has apparently been usurped by antique auction houses. So throughout this chapter *online appraisal* will be used as the generic identifier for assessment applications delivered via the Internet.

With the above as structure, the primary objectives for this chapter are to identify and describe:

1. The types of online appraisal which can most easily be integrated in the practice of cybercounseling
2. Factors to consider in selection of the delivery mode for the online appraisal
3. Special considerations related to online appraisal.

Underneath the Hood

Before addressing these objectives consider the premise that the basic concepts in testing and counseling, regardless of the delivery mode, are neither complex nor unique. A four-step model is both parsimonious and sufficient. The essence of both testing and counseling is simply the delivery of a

1. Stimulus that elicits a
2. Response that is compared to a

3. Reference which leads to an
4. Inference

Generalizing this model to a traditional testing application requires only that the first two elements become plural. On a typical test the stimuli (test questions) call forth responses (usually marks on an answer sheet) that are compared to a reference (criterion or norm) which then leads to some inference about the characteristics or current status of the test taker.

This simple model also provides an essentially complete description of what goes on in a counseling session. The counselor provides a stimulus (e.g. a question, a nod, a smile, or even silence). The client's responses becomes the data for mental processing by the counselor, in effect comparing the response to a reference stored in the counselor's memory, from which the counselor infers the most appropriate next thing to say or do.

Counseling and testing thus rest on the same underlying foundation. This may not have been so obvious when counseling was perceived as essentially a special form of personalized oral discourse while testing, in contrast, was seen as a procedure which usually distanced the counselor from the client through test booklets and answer sheets. The shared underlying basis becomes much more obvious when the data for both counseling and testing are provided through an online medium, for example a text-chat message.

The intent of the above is not to suggest that cybercounseling is just testing in disguise. There are at times differences in the specific objectives for an information exchange, differences that include standardized vs. personalized stimuli and the extent of "references" available for use in generating inferences. It is important, though, to recognize that these differences relate only to the intent of a particular exchange of information. The underlying features remain the same. Counseling and appraisal are not "different things." They are different applications of the same thing.

From this premise, the integration of counseling and testing in the online modalities is an inevitable outcome. The question for the counselor is not whether to use or avoid use of tests. The questions for the counselor become, "When do I want or need to use a reference that extends beyond what I have stored in my own memory? and How do I provide stimuli that will enable my use of such reference?"

Online Appraisal: Choose Your Weapon

The number of instruments available for online appraisal continues to grow exponentially, so the focus here is on general selection considerations rather than on specific tests. And, although some instruments generalize easily to application with adolescents, the content and examples in this chapter generally presume online interaction with adult clients. The Practice Standards for Internet Counseling (NBCC, 2001) do not preclude online service with children and adolescents but there are additional concerns regarding confidentiality and parent/guardian consent.

Online Appraisal Using E-Mail

Electronic mail was identified early (Casey, Bloom, & Moan, 1994) as a viable option for online communication in a counseling environment.

Sussman (2000) described e-mail as the easiest way for practitioners to establish online communication with their clients. No appointments are required. The frequency of its use at all levels of society makes it unlikely that any special training would be required. It's a typically available and easy form of communication between persons in adjacent offices and on different continents. It works for one-to-one interactions and as a way to maintain communication within a group.

That's the good news. The bad news is that for online appraisal, the utility of e-mail is mostly limited (with an important exception to be described below) to providing interpretation of test results completed elsewhere. One would have to have extraordinary patience (and questionable judgment) to embark on administration of a standard appraisal tool via exchange of e-mails.

This limitation, though, must be balanced against the broad availability and typical client familiarity with this tool. The online counselor need only direct the client to a resource where a desired appraisal instrument can be completed and make arrangements to receive a copy of the results. Collie, Mitchell, and Murphy (2001) provide particularly helpful suggestions for personalizing the e-mail exchange, including emotional bracketing and descriptive immediacy. The former adds a description of a current emotion, in brackets, to the message text. For example, "I'm recommending their suggestions [feeling lucky to have found this citation]." The latter, as needed, attempts to strengthen the counselor-client bond by extensive elaboration with affective and cognitive descriptors.

A variety of options is available to provide data for test interpretation. There is, for example, some security in turning to familiar instruments. Online versions of Holland's *Self-Directed Search* (http://www.self-directed-search.com/), the *Jackson Vocational Interest Survey* (http://www.jvis.com), and the *Kuder Career Planning System* (http://www.kuder.com/) are available and can be completed by clients for a nominal fee.

The Institute for Personality and Ability Testing (IPAT) offers an online option for the *16 Personality Factor Questionnaire (16PF Fifth Edition)* (http://www.ipat.com/scoresys.html) in which the counselor arranges for the testing and then sends a password and web site address for the test to the client. Results are e-mailed to the counselor. A comparable service is available through Consulting Psychologists Press for the *Myers-Briggs Type Indicator* and the *Strong Interest Inventory* (http://www.skillsone.org/).

Many free career and personality inventories are also available for online administration, for example the *Career Key* (http://www.careerkey.org/english/) and *CogStyle* (http://www.unlv.edu/Colleges/Education/EP/nl6_1.htm). The former provides scores in reference to the familiar Holland scales. The latter requires a password obtained from the author by submitting request with explanation of intended use and reports scores using an adaptation of *Myers-Briggs Type Indicator* categories.

Other options for free appraisal tools are easily identified with a web search using keywords "free online assessment." With some exceptions, including the two listed above, the rule of thumb unfortunately is that free instruments will typically be worth only what is being paid for them. There is significant variance in the quality of such instruments and prior investigation before recommending to a client is essential.

Tools in the general category of Rapid Assessment Instruments (Fischer & Corcoran, 1994) are especially well suited for use in online appraisal with e-mail delivery and can, unlike most instruments, provide the opportunity for both administration and interpretation via e-mail. Normative data may be available, but these scales typically place more emphasis on a criterion-referenced interpretation, often as just a direct report of current symptom status.

Either through a published scale, or even better with a scale of target symptoms created as a part of a prior counseling session, this technique can be used to maintain contact and monitor progress between sessions. On a schedule prearranged with the client, the counselor sends an e-mail with instructions for the client to indicate current status using the reply option available with essentially all e-mail client software.

This technique is useful both in integration with cybercounseling and as a supplement to face-to-face sessions. Figure 1 illustrates the use of this option.

Specific content will be determined by individual client needs, and this technique is highly adaptable. The focus can be on positive or negative characteristics for one or more problem areas with simple scaling as in the illustration or broader response options. Using progress reports in this manner is particularly recommended in applications of brief and/or solution-focused interventions (for example, Sklare, 1997).

Figure 1. Monitoring Client Progress Via E-Mail

Dear ___

I'm interested in how things have been going since your last report. For each of the problem areas we identified below, what I would like for you to do is: 1) click the reply button on your e-mail program, 2) put a number in front of each of these problems for your reply, and 3) send the message back to me.

To make it easier, let's use:

1 to mean *it's better*
2 to mean *it's about the same*
3 to mean *it's gotten worse*

Put one of those numbers in front of each of these problems we've been working on...

Feeling anxious when around other people
Having trouble falling asleep
Getting really irritable for no apparent reason
Afraid to answer the phone

Thanks for your help. I'm looking forward to our next session.

When using e-mail as the tool for online appraisal, confidentiality is an especially important concern. Most e-mail messages travel through the Internet as plain text files often bouncing from server to server. At any point along the way, the system administrator for the mail server has legitimate access to the message, not to mention the hackers who find ways to get access. Employers may monitor e-mail messages. Relationship partners often share e-mail accounts and addresses. Described as being akin to sending a postcard or using a phone on an old party line, perhaps an even more accurate image in this context is that of conducting an appraisal session seated in an open area of a shopping mall.

This already complex concern is compounded when the focus of a cybercounseling session is interpretation of test results. Typical test reports are replete with terminology that could be misinterpreted, misunderstood, and/or embarrassing to the client.

Getting the results from client to counselor is not difficult. Contingent on the form of the report and the computer skills of the client, a test report could be a file attachment to an e-mail message, pasted directly into an e-mail message, or faxed to the counselor. Insuring privacy at each step along the way, however, is both a need and a concern.

The Practice Standards for Internet Counseling (NBCC, 2001) suggest that e-mail encryption methods should be used whenever possible and require informing a client about the potential hazards of unsecured communication. A number of options are now available to encrypt e-mail messages, probably the most common of which is the PGP (Pretty Good Privacy) software (http://www.pgpi.org/).

Encrypting the e-mail message does, though, add some complexity to the process, primarily in that both client and counselor must have the necessary keys to decode the transmission. And concerns about national security may limit broad implementation of e-mail encryption, a factor clearly evident in the aftermath of the events of September 11, 2001.

In many counseling settings, increased attention to privacy and confidentiality of information is now a mandate, not just a suggestion. Full implementation of electronic transaction and security rules in the Health Insurance Portability and Accountability Act (HIPPA) is expected by October of 2003 with specific privacy requirements for any provider who uses electronic transmission in any form, ranging from claim submission to transmission of patient information via fax (APAIT, 2002).

In response to these requirements, software applications, for example *Bridgeway Express* (http://www.intacta.com/home/Products/products.html), are now available that compress large documents to a single page of unintelligible dots that can be transmitted via e-mail or standard fax machine. Confidentiality is maintained even when copies are left sitting on unattended fax machines.

Online Appraisal Using Text-Chat

Software programs in which participants exchange messages via typed text, while not as common as e-mail, are familiar to most computer users. Communication is accomplished by typing short messages with the extent of delay in message exchange contingent on the type of software being used. This format can approximate "normal" conversation and is certainly more rapid than an exchange of e-mails.

Factors to consider when implementing an application of the text-chat modality for online appraisal include the

- Type of appraisal service to be provided
- Categories of appraisal instruments that appear appropriate for use with this modality
- Type of software to be used to establish the link

Obviously, the examples above with e-mail used to interpret data obtained elsewhere would generalize easily to a text-chat with the advantage of a communication mode that approximates a face-to-face interaction. The text-chat modality, though, can do more, including clearly illustrating the premise at the beginning of this chapter regarding the underlying common features of counseling and appraisal (stimulus-response-reference-inference).

In theory, any appraisal tool that could be administered aloud to a client in a face-to-face session could instead be administered using a text-chat exchange. Consider for example, the career party exercise, called the Career Interests Game, detailed by Bolles (2001) with an online adaptation at the University of Missouri web site (http://career.missouri.edu/holland).

A client is asked to imagine attending a party with a requirement to join conversations of three of six groups. Each group is described and the descriptors are characteristics typical for the dimensions in the Holland career interests model. The client indicates which group would be the first choice, the second choice, and the third with these choices producing a tentative Holland vocational preference code. A client, for example, whose first choice would be to join a conversation with people who like to observe, learn, and analyze would have an "I" for the first letter in the code, and so forth.

This entire scenario could be completed in an exchange of text-chat messages. And, there is an advantage over face-to-face oral presentation in that the client could scroll back up through the messages to quickly refresh memory about the groups.

Would such an interchange be defined as counseling or defined as testing? The answer from the perspective here is, 'Yes'; it is both. It is an exchange of messages designed to enhance the client's understanding of self in relation to occupations. That is counseling. It is based on responses to a predetermined stimulus set with an identified (and public) reference for comparison. That is testing.

Dividing appraisal instruments into those intended to tap *typical* performance (e.g. attitude scales, personality questionnaires, interest inventories) and those intended to assess *maximum* performance (e.g. intelligence and aptitude tests), it would appear that any one of the former could be administered and interpreted online via text-chat. If, for any reason, a counselor in face-to-face interaction would have chosen to read the questions to the client, those questions could instead be presented to the client as text-chat messages. Caution would be required when norms are used, but no more so than would be essential when changing from test booklet to oral presentation in a face-to-face session.

When the online appraisal is with an instrument designed to assess maximum performance, there are additional concerns, for example timing and credibility. Measures that require precise timing remain problematic in online administration because of several factors, including the quality and stability of the Internet connection. And, when the stimulus is a cognitive function question (e.g. vocabulary, mathematical reasoning), there is nothing to absolutely prevent a client's looking up the answer in a dictionary or asking someone nearby before giving a response.

With current technology, concerns about credibility appear to preclude assessment of maximum performance in any "high stakes" situation, for example a job application. Even this limitation, however, may be minimized in the relatively near future. Biometric facial and/or iris scans, once evident only in science fiction movies, may be not so far away from the office computer (Enbysk, 2002) and the costs are decreasing with that capability being built-in to some new computers.

In the meantime, however, there are other possible applications for appraisal of maximum performance. For an objective of enhancing self-knowledge to use in career exploration it would seem reasonable that the counselor could create an online relationship condition in which honest responses were more likely. There also are instances in which it would be helpful to the counselor to have more information about the client's ability for use in forming credible hypotheses about the direction for intervention.

Both for the self-knowledge and cognitive screen scenarios, a short test with high verbal loading, for example the *Slosson Intelligence Test-R* (Nicholson & Hibpshman, 1990) would appear amenable for administration via text-chat. In such application, it will be crucial for the counselor to use only broad interpretation (e.g. high, mid-level, low) when comparing the responses to the reference data in the manual because of the obvious unknown impact of the different administration mode.

In general, the text-chat modality would appear to have potential for a variety of applications in online appraisal. This modality provides a viable option for both interpreting and administering appraisal instruments with caution, however, of an implicit assumption that the client is able to form written expression relatively rapidly and has the keyboarding skills to respond to stimuli without inordinate delay.

Online Appraisal Using Text-Chat+Video

A primary concern when using text-chat for online appraisal is the loss of visual cues. In face-to-face appraisal, particularly with affective instruments, a client's physical response to a stimulus may be as, if not more, significant than the verbal. The obvious solution for online application is to add video to the computer-mediated communication.

Online appraisal via video conferencing is not a new phenomenon. Support for its efficacy is evident in reference to both general (Ball, Scott, McLaren, & Watson, 1993) and neuropsychological (Troester, Paolo, Glatt, Hubble, et al., 1995) assessment applications. Although typical applications of video conferencing have required sophisticated and expensive hardware configurations that may not be available for most cybercounseling applications, alternatives are available. For example, Jones, Coker, Harbach, and Staples (2002) detail procedures for integrating video broadcast with text-chat using free or relatively inexpensive web cam software.

Visual input would certainly seem a valuable component for use in online appraisal (Coursol & Lewis, 2000; Sampson, 2000) and there are supportive data. For example, Jones, Harbach, Coker, and Staples (in press) compared text-chat with face-to-face modality for delivery of online test interpretation and found ratings of session depth equivalent to the face-to-face modality when the text-chat included a video window showing provider and participant.

A cautionary note evident in the study above, however, was that addition of video broadcast to the text-chat brought higher ratings of discomfort. A follow-up study (Jones, Harbach, Coker, & Staples, 2001), in which the provider's video image was broadcast to all participants during the text-chat and random assignment was used to determine whether the participant's video image was broadcast to the provider, was conducted to further explore the etiology of the discomfort. Consistent with the initial data, higher ratings of discomfort were evident when the participant could be seen on the provider's screen. There was no difference in session depth ratings contingent on broadcast of participant image.

Additional study of the phenomenon of "being seen" is needed, but these data do support attention to extra steps that may be needed to reduce client discomfort when video images are broadcast. These data may also provide some explanation of a finding by Joinson (2001) of more disclosure of information by visually anonymous participants.

Concerns about privacy and confidentiality described above in regard to e-mail service delivery are no less important when online appraisal is being provided using text-chat or video conferencing. Text messages without encryption are an "open letter" being broadcast on the Internet with clear privacy risks. Alternatives to minimize this risk are examined in the next section of this chapter.

Selection of Text-Chat Delivery Mode

Obviously, when the online appraisal is being conducted via e-mail, both counselor and client will typically be using their own familiar e-mail software. When text-chat with or without video is the preference, the situation is a bit more complex. Choices include:

- Joining a hosted site
- Hosting a chat with Perl software
- Hosting a chat with Java software

Hosted sites, sometimes with video, are readily available and frequently either free or relatively inexpensive. Microsoft's *NetMeeting* (http://www.microsoft.com/windows/netmeeting/) for example, provides text-chat, video conferencing, and other features as a free download. Instant messaging and/or text-chat is available through several browsers and Internet Service Providers, for example *AOL* (http://www.aim.com/index.adp), Netscape (http://wp.netscape.com/aim/index.html), and Opera (http://www.opera.com/support/tutorials/win/im/).

The Internet is replete with chat rooms. Joining is often free. Many offer access to 'private rooms' for conversations open only to selected participants. Chat rooms offer a readily available resource for online delivery of counseling services.

However, for online appraisal applications, a counselor may be better served using software personally tailored by the counselor for her or his individual use. A key concern is privacy.

Private areas in chat rooms require some special permission, usually a password, in order to gain entrance. But all communication in a chat room is typically available to, and often monitored by, a chat room administrator. Chat room administrators serve an important purpose in precluding misuse of the chat area but effectively eliminate the capability to promise confidentiality to a client.

Hosting a chat area for online appraisal purposes may appear to be a daunting task but is well within the capabilities of a counselor with average computer skills. Essential software can be obtained at little or no cost. Hosting capabilities may be available through the Internet service provider or accomplished on any computer with Internet access.

Locally hosted chat software packages are of two types, each with inherent advantages and some disadvantages. The most common text-chat programs use the Common Gateway Interface (CGI) protocol that allows users to a web site to run a program on the host computer. The text-chat program is most often a Perl (Practical Extraction and Reporting Language) script. Perl scripts have several advantages for implementation as a text-chat resource for online appraisal. They are easily obtained, relatively easy to personalize, and require only a web site to which files can be uploaded and permission to run the software on the site. There are many examples of such programs available for free download including specific instructions for installing and customizing. The *Chat-N-Time* package (http://www.tesol.net/scripts/Chat-N-Time/index.html) is one example of typical free text-chat software. Perl scripts are remarkably robust across various operating systems. If a client can access the Internet, that client can usually access and participate in a text-chat.

Response time is probably the primary disadvantage. In this type of text-chat, a message is essentially just input from an html form to a "virtual" script on the host site. Since all users are accessing the same script, there is an inevitable delay and occasionally some message cross over (e.g. client has already sent response when counselor sends follow-up query asking if clarification is needed).

Typical Java-based text-chat software mirrors Perl script advantages and disadvantages. Exchange of messages is near real-time, comparable to the increasingly familiar instant messaging program. Installation and customization are more difficult.

Required software usually includes a Java "application" program running as a chat server on the host computer and a Java "applet" accessed by the user with a standard html file. During the text-chat session, the applet is temporarily copied to and run on the user's computer; the server component distributes the messages through a predetermined socket (port) on the computer, rather than a shared script.

The counselor and client must be using a browser with Java enabled. And, there are occasional annoyances with differences in computer platforms (e.g. Windows and Macintosh render Java only "almost" the same).

Whether Java-based text-chat is a viable alternative for online appraisal depends on the computer skill (and patience) of the counselor. The several advantages though are sufficient to warrant some consideration and there are free downloads, for example *okChat* (http://www.okchat.com/), with which to experiment.

Computer socket connections can also be used to broadcast video images, and the addition of visual input may add an important dimension to online appraisal applications. There are some clinical concerns (described earlier in this chapter) but data to this point generally support higher ratings of session quality with video when text-chat plus video is compared to text-chat alone. As with the text-chat application, free and/or inexpensive software for video broadcast is now readily available. For example, consider the *Webcam2000* (http://www.stratoware.com/webcam2000/) package.

A strong recommendation would be to find software that uses socket-based communication rather than uploading picture files at predetermined intervals. With web cam software, even the former has some limitations in simulating actual visual input and the latter results in such erratic images that its utility is probably just as a curiosity whose value fades quickly.

The intent in this section has been to encourage experimentation with a variety of communication formats. The software examples were intended to serve as illustrations of available packages to learn about the process and not as specific endorsements. Development in this area is so rapid that any such listing is becoming dated even as it is being written.

If an Internet Service Provider is unable (or unwilling) to allow the access needed to install programs like those described above, free software that allows you to host your own web site is available. And programs are available that allow such use even if your primary access is through a dynamic (e.g. the specific number assigned to your computer varies with each access) rather than static IP.

Special Considerations in Online Appraisal

In preparing the outline for this chapter, this last section was envisioned as a kind of miscellaneous category for topics that did not appear to fit easily into the other chapter headings but warranted attention in applications involving online appraisal. They are:

- Appraisal considerations for clients with disabilities
- The text-chat environment
- Thinking outside the box

Considerations for Clients with Disabilities

Delivering online appraisal for clients with disabilities requires attention to providing barrier-free web sites (NBCC, 2001) and to features in specific disabling conditions that might influence speed and/or accuracy of text processing. For example, a delayed response to a query might be the result of the client's emotional response to that content but could instead be simply a function of difficulty in cognitively processing the question in text format (or just a slow Internet connection).

Voice synthesizers that read computer screens enable persons with visual disability to traverse the web but can easily become bogged down with multi-layered screens. Providers are strongly urged to review the information associated with *Bobby* (http://www.cast.org/Bobby/), a program created by the Center for Applied Special Technology to help identify and repair web-site barriers to access by persons with disabilities. Providers whose sites include extensive visual graphics may, for example, want to prepare a text-only version of opening pages with clear links to the areas used in appraisal applications. Obviously, whatever modifications a counselor would make in a face-to-face appraisal involving a person with a disability (e.g. norms, time limits, and so forth) is also needed in online applications.

The "jury is still out" on whether the negative attitudes and stereotypes of the general population toward persons with disabilities (for example, Gething, 1992) generalize to the attitudes of practicing counselors. Some studies (e.g. Carney & Cobia, 1994) have suggested that counselors, particularly those with a rehabilitation emphasis, have a more positive attitude than is evident in the population as a whole.

Even if counselors are less prone than others to prejudge client characteristics on the basis of an evident disability, clients may have learned to filter their responses based on an expectation of such bias. When the appraisal is being conducted in an online format, particularly without visual input, this question is moot. One could in fact easily mount an argument that the online modality for assessment offers the higher probability that the counselor's inferences will not be unduly influenced by irrelevant physical characteristics.

The Text-Chat Environment

There is an evident, and at times disconcerting, sterility in most experiences with computer-mediated communication. Messages intended to be informative often come across as cold without the accompanying voice tone or facial expression.

Emotional bracketing and descriptive immediacy (Collie, Mitchell, & Murphy, 2001) were described earlier as tools to compensate in the e-mail environment. In the text-chat environment avatars (small pictures used to represent self) and emoticons (visual symbols created with keystrokes) are used for this purpose. The text-chat environment also includes an array of acronyms to express emotions and/or speed the message exchange. Chisholm (2002) provides an especially useful resource on typically used emoticons and acronyms.

The extent to which the acronyms and visual symbols are appropriate for use in an online appraisal environment is contingent, at least in part, on style preferences of the counselor. Some acronyms, for example "MTF" for "more to follow," may be quite useful to inform the other person that a text-chat message has been received and a response is being prepared. In general, however, informality should probably be avoided in online appraisal applications for the same reason that some formality is preferred in face-to-face counseling sessions to differentiate such sessions from informal conversations.

Text message sterility could be eliminated with actual voice transmission via the Internet to the computer sound card, and this capability is included in some conferencing software. At the time of this writing however this technology does not yet appear to be "ready for prime time."

Struggling to find meaning in text messages appears preferable to struggling with garbled voice transmissions. The problem is especially evident in video conferencing with audio transmission. The gap between facial movement and sound is often akin to poorly dubbed foreign movies.

Message encryption is an important concern and is especially problematic in text-chat with shared Perl scripts. Steps taken at the host level to encrypt the messages are essentially useless unless messages are coded before leaving the local machine, and this adds a significant complication in setting up online interactions with distant users.

Java-based text-chat software is more amenable to message encryption because in this type of application, the local machine is actually running software temporarily (and invisibly) downloaded from the host. The software can be adapted so that after the client types the desired message and presses the key to send, the message is coded *before* it is transmitted over the Internet. The target machine receives a coded message and then, again at the local level, the software decodes the message before it appears on the screen.

The actual encryption can be complex or as simple as a letter substitution code. The latter code could be easily broken but the intent is just to preclude eavesdropping as the message makes its way through servers on the Internet. Even the most complex codes can be broken given enough time, motivation, and skill (just as a person with sufficient desire and tools could "listen in" to face-to-face conversations in the counselor's office).

Thinking Outside the Box

Most of the emphasis in online delivery of counseling and appraisal services has thus far been on simulating a face-to-face interchange in a web-based environment. The next logical step would appear to be the design of online appraisal applications that do things difficult if not impossible to accomplish in a standard face-to-face environment.

For example, a typical questionnaire item asks the client to select among options like "afraid," "somewhat afraid," and "not afraid" for the feeling associated with entering a room full of strangers. More valuable information might be obtained by creating online virtual reality simulations in which the client would experience entering such a room. The client could then either be asked to report the feeling or, with technology that appears just over the horizon, the counselor could observe the impact with some type of biometric measure.

Appraisal associated with career counseling would seem to offer an especially rich setting for virtual reality simulations. How the results would compare with those from current instruments is unknown, but if such applications are as valuable as anticipated, an interesting predicted outcome would be a new dialogue in the professional community. The new debate may be on the extent to which the online appraisal features could be replicated in a face-to-face environment.

Garbled audio transmissions were described above as the rationale for using the text-chat modality for message transmission. A possible utility of this "problem" was explored in a study (Jones, 2001) using purposeful degrading of the aural stimulus in an online appraisal application. Six declarative sentences were prepared with increasing levels of speech compression. Following the presentation of the sentence the user, in multiple-choice format, is asked to identify the actor in the sentence, the setting, and the target (e.g. the man was in the kitchen to get a pencil).

The premise was that the perceptual process in responding to incomplete sounds might be comparable to that of the incomplete picture format often used in standard assessment of simultaneous processing in Luria's model of neuropsychological function. More research is needed, but initial results were promising.

Combining various modalities and appraisal objectives into single integrated application is another possible direction for the future. To study the impact of video broadcast on perceived session quality and client comfort (Jones, Harbach, Coker, & Staples, 2001), a software package was prepared with several elements. Java-based chat was used for real-time text messaging; Perl script was used to write temporary files to the host computer; video broadcast was accomplished with web cam software and participants completed an online career interest survey prepared in Java.

In actual use this application was not complex. Text-chat was used first to establish the relationship, respond to questions, and then direct the participant to the online test. The counselor's video image was in a small window on the participant's screen throughout the session. While the online test was being completed, periodic loading of a status file enabled the counselor to monitor the process. The participant could return to the text-chat at any time to ask for assistance. A completed test meant it was time for the counselor to load the results file and return to the text-chat for interpretation.

A far less complex integration of technologies uses the tool most familiar to both counselor and the client, the telephone. A line for standard phone use near the computer, an Internet connection that does not use this line, and a camera with web cam software provide all the resources needed to conduct an online appraisal with some features of video conferencing. The web cam software streams the video image to a web page. The client needs only the resources to be simultaneously on the Internet and talking on the phone. During the session the client can view either the counselor's image or anything else that would be helpful in the appraisal by going to the designated web page.

Concluding Thoughts

In the early publications about the possible impact of technology on counseling, few, if any, could have anticipated the dramatic changes that are now evident. The illustrations in this chapter, while confidently presented as current state of the art, will no doubt soon be consigned to the "that's how they used to do it" category.

In the midst of the ongoing change, some constants remain intact. In both cybercounseling and online appraisal, the counselors provide stimuli, the clients respond, the counselors process those responses against some form of reference, inferences are drawn which lead to more stimuli. We may prefer to call it testing when a predetermined set of stimuli is delivered and compared to a public reference in the form of a norms table as opposed to each new stimulus being contingent on a prior response. But even that distinction fades with adaptive testing that selects each subsequent test item contingent on the response to the one that preceded it.

The online environment changes only "how" this is done; "what" is being done remains the same. At the end of the line, regardless of whether one chooses to call this counseling or testing, this enterprise ultimately rests on the wisdom and skill of the counselor to bring meaning to the responses through drawing appropriate inferences.

With that in mind, and returning to the metaphor at the beginning of the chapter, it seems now safe to assume that the relationship between counseling and testing is forever. To adapt an oft-misquoted line from Mark Twain, reports of the demise of this marriage were premature. (What Twain actually wrote, in a letter to a friend in May of 1897 was that the "report of my death was an exaggeration.") I learned that, by the way, on the Internet (http://www.twainquotes.com/Death.html).

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Chapter Ten

E-mail Rules! Organizations and Individuals Creating Ethical Excellence In Telemental-Health

Dan L. Mitchell and Lawrence J. Murphy

> *"Gary" feels hopelessly trapped. His life, he feels, consists of work, eat, and sleep... aside from sneaking out of bed at 4:00 a.m. to meet with his online lover, that is. But even that has him feeling trapped now because, while he feels that he hasn't really given his marriage a fair chance, he also has little motivation to try to change the 24-year "ball-and-chain" relationship. Racked with guilt about the affair and hopeless about the future of his marriage and his lifestyle, he begins considering a way out. He lives within walking distance of Lion's Gate Bridge in Vancouver, British Columbia. The thought of finality brings a frightening sense of peace.*
>
> *Gary consciously focuses his attention on his computer screen, where he now sits at 5:05 a.m. having just written his online lover the e-mail to say it's over.*
>
> *The barrage of emotions is overwhelming. Scaring himself with the calm temptation of one final jump, he types "online counseling" into his search engine hoping someone out there can help...*

In this chapter we will examine several ethical issues pertaining to telemental-health. We first consider this topic from the perspective of professional organizations. We will then explore numerous specific ethical issues pertaining to the use of e-mail by individual professional helpers and offer suggestions for awareness and action.

Why Ethics?

The question may bring us back to an earlier stage of life – perhaps our adolescence – when we questioned, "Why all these rules?" Before we delve into the topic of telemental-health ethics, perhaps we need to remind ourselves, from the perspective of caring adult professionals, why we have codes of ethics.

Our intention and hope is to help, support, and heal those who seek out our professional assistance. Ethics are based on the ongoing collective development of professional experience, the natural outflow of our desire to care effectively for the needs of our fellow human beings. Ethics help us define what is and what is not an effective means of providing professional care. Ethical codes have emerged out of our collective heart-felt dedication "to the enhancement of human development throughout the life-span"(American Counseling Association, 2002, Preamble section, [para. 1]) and have as their "primary goal the welfare and protection of the individuals and groups with whom . . . [we] work" (American Psychological Association, 1992, Preamble section, [para. 2]).

Ethical Principles for Telemental-Health

Telemental-Health Defined

We define *telehealth* as the use of telecommunications technologies to make health care available to anyone who, whether by choice or necessity, receives care without the physical presence of a caregiver (Collie, Mitchell & Murphy, 2000). In this chapter, we will refer to the delivery of emotional, relational and mental health services via telecommunications technologies as *telemental-health.*

Distinct Ethical Guidelines, Regularly Amended

When it became evident that the Internet and its features for human communication were being used by helping professionals, many professional counseling organizations set out to develop distinct codes of ethics to address the unique situations created by Internet technology. Together with the National Board for Certified Counselors (NBCC), the authors helped develop the first of these codes in 1997. The NBCC published this code under the title "Standards for the Ethical Practice of WebCounseling." Since then, the NBCC has made amendments to the initial version, and now entitles their code "The Practice of Internet Counseling" (National Board for Certified Counselors, 2001).

Several other professional organizations have also developed distinct guidelines for the ethical delivery of telemental-health services. At the time of writing, the most well known examples were:

- The American Counseling Association's "Ethical Standards for Internet On-line Counseling" (American Counseling Association, 1999);
- The American Psychological Association's statement on "Services by Telephone, Teleconferencing, and Internet" (American Psychological Association, 1997);
- The Health on the Net Foundation's "Health on the Net Code of Conduct (HONcode) for Medical and Health Web Sites" (Health on the Net Foundation, 1997);
- The National Career Development Association's "Guidelines for the Use of the Internet for Provision of Career Information and Planning Services" (National Career Development Association, 1997); and
- ISMHO/PSI's Suggested Principles for the Online Provision of Mental Health Services (International Society for Mental Health Online, 2000).

These codes have identified many of the unique issues that emerge from the application of traditional ethics codes to telemental-health.

Leadership to Emulate

The NBCC demonstrated exemplary leadership in developing a distinct ethical code for "Webcounseling," and then amending their initial code. The NBCC's approach underlines two important principles that we hope other professional organizations will emulate:

1. that ethical principles for telemental-health are best developed as separate addenda, distinct from the professional organization's traditional code of ethics; and
2. that the distinct ethical guidelines pertaining to telemental-health be regularly and frequently updated.

Standard ethical codes for the helping professions occasionally need to be updated as the values of society change and as new techniques and services are developed and included within the umbrella of what defines the profession. One of the most rapid areas of societal change is the technology sector. In keeping with the rapid development of new technologies, the need for frequent and regular updating of ethical codes that pertain to the delivery of telemental-health services is especially important.

Some may question, "Why is it necessary to create distinct ethical guidelines for telemental-health? The basic ethical values of our profession have not changed. Is it not merely a matter of applying the already existing principles to cyberspace?"

Telemental-health is a field in its infancy. It is unfamiliar territory and the issues are complex. In fact, by nature of the ongoing rapid pace of technological development, telemental-health service delivery will *continually* be unfamiliar and complex, ethically speaking. The sheer volume of ethical questions and issues that arise warrant specific, distinct attention in ethical codes. We are not overly cautious to suggest that, whenever a new technological application is to be used with clients, practitioners should engage in the process of ethical decision-making. Professional organizations that develop and regularly amend distinct ethical guidelines for telemental-health demonstrate their recognition of the ethical complexity of telemental-health practice, and offer support to their members who face the daunting task of ongoing ethical decision-making.

Numerous technological communication tools exist that enable professional helpers to creatively provide services, ranging from the telephone, cellular phone and fax to Internet relay chat and videoconferencing. However, providing counseling services via e-mail provides a host of benefits to counselors and clients (Murphy & Mitchell, 1998). As well, since e-mail use by professional helpers is so commonplace and ethical breaches are so easily overlooked, the remainder of this chapter is devoted to a discussion of ethical issues pertaining to e-mail.

Ethical Principles Applied To E-mail Use By Professional Helpers

Most ethical codes include a section advising professional helpers through the process of ethical decision-making. An example of such a process is the "integrative model" of ethical decision-making as presented by the Canadian Counselling Association (Schulz, 2000). Step one of the integrative model states simply: "The key ethical issues of a particular situation are identified" (p. 11). Reflecting ever briefly on this step as it pertains to e-mail use yields numerous questions:

- Should e-mail be secured by encryption when used with clients?
- What if the security system requires set-up? What if it is different than regular e-mail and therefore my clients have to adjust to new software?
- What if my clients don't care about security or don't want to bother using the secure system I provide? Should I give them the right to choose *not* to use the secure system and still receive my services?

- What about just using informed consent? – something like, "If you use this method, your message is not secure and your confidentiality could be breached."
- Should I publish an unsecured e-mail address? What if a client emergency is received and there is no identifying information? Do I need to collect contact information if first contact by e-mail is available to the client?
- If there is a client emergency, do I have to report the situation if the client is in another country? If I do have to report, to whom do I report? What if the situation I define as a "client emergency" is neither illegal nor considered an emergency in my client's culture? To whom do I report? My local authorities, or the client's?
- What if there is a delay between the client sending me an emergency message and the next time I sit down to check my e-mail inbox?

Who, Me?

Using e-mail for communication with colleagues and other professionals is an everyday experience for most professional helpers. Communicating with clients via e-mail is less common. Nevertheless, many counselors *do* exchange e-mail correspondence with clients, even if it is simply to reschedule an appointment or to clarify a billing issue. In the emerging field of coaching, e-mail use with clients is prevalent.

Despite our daily use of e-mail with colleagues and/or clients, we may not be aware that there are several practical issues and ethical principles that deserve close examination. Steps two, three and four of Schulz's (2000) integrative model of ethical decision-making encourage us to:

- (step two) examine relevant ethical codes
- (step three) examine "the moral and ethical principles that are important to the situation" (p. 12), and
- (step four) explore possible resolutions.

Practitioners can accomplish step two by carefully reading the ethical guidelines for telemental-health that were identified earlier in this chapter. The discussion that follows, which takes us through steps three and four, applies not just to those who consider themselves to be "cybercounsellors." The discussion applies to *every* professional helper who uses e-mail.

Unsecured E-mail

Most people know that regular e-mail is not secure. But professional helpers may have overlooked the primary ethical implication of this fact: that regular e-mail does not protect their clients' confidentiality. And yet many of us are giving clients access to our e-mail addresses by publishing them on our business cards and web sites. Once that e-mail address is published, it is available for anyone to use who has Internet access.

This is an example of an ethical issue that is qualitatively different in the context of telemental-health as compared with face-to-face work, where we have to actively do something in order to breach a client's confidentiality. With telemental-health it is passive. We merely have to use regular e-mail as we've always done. Although one may simply be writing to discuss a new session date and time, the client may respond with highly confidential information.

Case example: Sensitive personal information in the wrong hands.

> Richard and Teresa are involved in a messy divorce involving child custody and Teresa has taken a friend's advice and is seeking counseling through an agency that does not offer online counseling. On this particular week her therapist has an emergency and sends her a quick e-mail to let her know that they will need to change their appointment. Teresa writes back to say that, actually, she is pleased. She goes on to say, "I could use the extra time. When I was in university I used to do a lot of drugs and the other night I dropped acid with some old college pals. It was a ridiculous thing for a 40-year old woman to do I know. Anyway, I need a few days to recover! :-)"
>
> Richard has a friend who might be described as a hacker. He has a little program called a "sniffer" sitting watching e-mail coming and going from the counseling agency. When it recognizes Teresa's e-mail address it grabs a copy of the e-mail and sends it to Richard's friend. The next day it is in the possession of Richard's lawyer.

Domain Names

Many e-mail addresses owned and made public by counseling agencies and clinical practitioners contain domain names that reveal their professional identity (A domain name is the portion of an e-mail address that follows the "@"). Publicizing such e-mail addresses does not protect client confidentiality.

Case example: Participation in counseling revealed.

> Dorothy uses her home computer to communicate with her counselor to re-schedule appointments and send in journaling assignments between sessions. She sends her e-mail messages to info@counsellorbob.ca. Her teenage children also use this computer. With default e-mail settings, computers store copies of all outgoing messages. Although Dorothy is careful, she has not deleted e-mails from her "Sent Items". One evening her son is looking for an e-mail that he sent to his girlfriend that seems to have been lost. When he sees "counsellorbob.ca" in the list of sent items, he realizes that Mom is seeking personal counseling.

Capability To Take Emergency Action

If clients or prospective clients convey emergency information using regular e-mail, counseling practitioners and agencies may be powerless to take action since regular e-mail may not contain enough information to trace even its geographic origin, let alone the sender.

This is quite unlike the experience of someone telephoning into an agency and disclosing suicidal thoughts. With the client on the telephone there is the opportunity to talk with him, perhaps to book an appointment or to refer him to emergency assistance. In such a case we at least know that the client has received our communication. As well, telephone companies now have a feature that allows us to find out who last called. A land-line phone number gives the police everything they need to locate an individual and, in an acute emergency, dispatch appropriate emergency assistance.

Case example: The untraceable suicide note.

This case example refers back to "Gary," the cyberclient with whom we opened this chapter.

> It's Tuesday, 8:05 a.m. Setting down her coffee, Joan, an experienced counselor, sits down at her computer to check her e-mail before her 8:15 counseling session.
>
> She finds three new messages. One of them is from a sender she does not recognize. Her first instinct is that it must be junk mail, but then she notices the subject line: "Please Help"
>
> Upon opening the message, Joan's emotional alarm bells resound as she reads these words:
>
> "Hi I'm sitting here debating whether to end it all. My marriage is hopeless. I've been having an online affair and I don't even care if my wife finds out. I know exactly how to stop it all, and the freaky part about it is that I might just do it . . ."
>
> Joan knows she needs to take action, but is uncertain what to do. She looks for a name, a phone number or any identifying information. She checks the e-mail address hoping for some kind of clue. It is no help at all: "bluejay374@hotmail.com."
>
> Fighting back the urge to panic, she prints out a copy of the e-mail distress call and gives it to her secretary hoping he will know what to do. He does not. But he offers to call the police to see if they might know how to trace the origins of the message.
>
> "Good idea," Joan says, as she tries to pull herself together to focus on her client who is now in the waiting room . . .

Although this is a fictitious scenario, it could be real. The message could have been a disclosure of child abuse. Or it could have revealed a possible intention to commit homicide. We can be sure that it is only a matter of time until we receive an emergency e-mail message.

The Issue Of Legal Jurisdiction

If we receive an emergency e-mail message from someone who lives outside the geographic boundaries of our own legal jurisdiction, what do we do? For example, if we collect contact information and secure our first-time client e-mail messages, someone living out of the country may still write:

> "My son is idiot. I beat him hard but still won't listen!
> What I should do?" [broken English intentional]

How are we to respond? What if beatings are not illegal in the client's country? What if beatings are culturally acceptable? If I decide that I must act to protect the child, how can I track down the child protection authorities in the client's country, if they even exist?

Liability

It is, as yet, unclear whether professional liability insurance will cover helping professionals who have not minimized the exposures (risks) noted above.

New Principles and Practical Resolutions

Publication and Provision of E-mail Addresses

There are a variety of possible alternatives concerning the ethical issue of regular e-mail use by professional helpers. Outlining these constitutes the fourth step of Schulz's (2000) model of integrative ethical decision-making. Working through such a process is key for each element of a therapist's use of online communication tools.

Don't Publish Regular E-mail Addresses

This option, while ethically sound, may be neither convenient for clients nor helpful for practitioners and agencies attempting to market their services.

Publish Regular E-mail Addresses with a Warning

The warning would let clients know that they must waive their right to confidentiality. This option gives clients an opportunity to *choose* whether they are willing to waive their right to confidentiality.

While a warning informs clients of the confidentiality issue, it raises other important questions. If clients wish to gain access to professional counselors via e-mail, is it ethical to ask them to give up their right to confidentiality to cover our inability to protect them? Would a "non-confidentiality" waiver stand up to legal scrutiny?

A further necessity, if counselors implement this second option, is that the warning must also contain a request that clients include basic contact information. This, then, would allow practitioners and agencies to act on emergencies.

However this, too, is a weak solution because the warning and the request contradict each other. If anything, the warning about the lack of confidentiality would influence clients to avoid discussing private matters. We put them in a bind if they must include their private residential address or telephone number and yet send it in an unsecured e-mail message.

Publish Regular E-mail Addresses, But With A Generic Domain

In order to address the domain name issue (as described earlier in the chapter), e-mail addresses that are published should be either generic (e.g., info@hotmail.com, info@yahoo.com) or in some other way obscure any affiliation with the counseling profession (e.g., info@tlcobc.com). This, however, does not address the issue of confidentiality.

Provide Clients Secure E-mail

Providing for clients secure e-mail with contact information collection capability resolves several issues, but special attention must be given to a number of considerations.

First, since ethical guidelines require professional helpers to provide secure e-mail for their clients, does this mean that clients will be required to download and install special software? If so, there is a risk that the process of downloading and installing software may cause clients further distress. Ideally, whatever secure e-mail solution is provided, the process for clients should minimize any technical demands or expertise. In addition, telephone contact should be offered in case clients encounter technical difficulties.

Second, the domain name issue remains. Professionals should choose an e-mail security method whose domain name obscures any affiliation with counseling.

Third, the process of providing clients with secure e-mail should be integrated with the collection of their contact information. This minimizes the burden on clients to supply contact information in a separate process. In addition, the process of collecting and storing contact information should be secure (by housing the database on a secure server for example). Otherwise, again, confidentiality is compromised.

Reporting Client Emergencies

When professional helpers have reason to believe that a client emergency may be taking place outside the geographic boundaries of our legal jurisdiction, we believe that the most appropriate course of action is that we contact our appropriate *local* authority. As well, after making such a report, it is sound practice to follow-up by asking the local authority what measures were taken.

It makes sense that professional helpers should act in accordance with the ethics and laws of the land in which they live. This principle, based on our own experience of working with local authorities in British Columbia, is also upheld by the Canadian Nurses Association:

Nurses engaged in telepractice are considered to be practicing in the province/territory where they are located and currently registered, regardless of where the client is located. As such, they must provide nursing telepractice services consistent with the Code of Ethics for Registered Nurses, professional practice standards, relevant legislation and practice guidelines of the province/territory in which they are registered and practicing.

The licensure model endorsed by CNA, in which locus of accountability is where the nurse is located, is believed to be the most cost-effective and efficient for regulatory bodies to implement and in the best interests of both clients and nurses. The model avoids complex issues of administration of multiple licensure agreements that could present barriers. To date, legal precedents have not been set in this area of nursing practice" (Canadian Nurses Association, 2001, p. 1).

Intake Procedure: E-mail Usage Intentions of In-person Clients

Most clients in North America use e-mail. It behooves us to find out whether and how our in-person clients may wish to use e-mail with us. If we discover that many clients wish to use e-mail with us, we can then take responsible steps to manage the situation ethically. We offer this simple questionnaire as a way to assess the need to apply telemental-health ethics to each new client upon their admission into a counseling or coaching relationship.

Client E-mail Usage and Service Delivery Questionnaire

Counselor asks client these questions:	Action, if yes	Action, if no
1. Do you ever use e-mail?	Ask question 2.	End of questionnaire.
2. Can you ever see yourself wanting to contact me by e-mail?	Offer to set up a secure e-mail account for client. Ask question 3.	End of questionnaire.
3. Would you be interested in trying one or more of your counseling sessions online, by secure e-mail?	Inform client of risks and benefits (terms and conditions) of online counseling. Ask question 4.	End of questionnaire.
4. Would you like to try our next session online, by secure e-mail?	Book a time to reply to client via secure e-mail. Give client guidance abour sending first message (i.e., questions to answer, technicl support for logging in, etc.)	Invite client to send a secure e-mail message any time. Inform client of response time.

Ask Your Insurance Provider and Your Lawyer

Some insurance providers are still not offering professional liability coverage for telemental-health service delivery. Some providers *do* offer coverage, but stipulate a variety of limitations such as where court proceedings must take place and geographic constraints for service delivery.

Liability insurance coverage may not reflect legal issues. For example, providing cybercounselling to clients across state lines or to clients in other countries may be construed as illegal by certain authorities. This could be the case in spite of an insurance provider's willingness to cover professional liability worldwide.

Because of these legal and liability considerations. It is wise for prospective telemental-health practitioners to discuss their intentions with their insurance provider and to seek legal advice.

Case example: Secure e-mail with registration.

> *"Neil" has just completed his first year of university. An "A" student in high school, Neil is shocked to discover that his grades have dropped to a "C+" average. Neil is worried about how his parents may respond. He's also feeling guilty that the level of "partying" he engaged in may have been a factor that contributed to his academic*

decline. He feels the year was "a write off".

He feels the need for support and advice before breaking the news to his parents. He considers visiting the university counseling agency. Later that day, while browsing the Web, Neil wonders whether counseling is available online. He discovers that many online counseling services are available. He reads about one of the services, and decides he'd like to give it a try.

He notices that he has been provided a secure sockets layer (SSL) connection, and so is comfortable providing his personal contact information. He is automatically guided through the process of setting up a secure web-based e-mail system and consenting to a "Counseling Service Agreement." Confident that the service he has chosen is obviously a professional one in which care has been taken to ensure his privacy and well-being, he begins to relax and feel the release of heaviness as he writes his secure message to his new counselor.

Awareness and Action

The experience in most professions today is that the rapid pace of technological advances speeds ahead of ethical considerations. The counseling profession is no exception. Professional organizations like the National Board for Certified Counselors (NBCC) have demonstrated foresight and leadership by developing distinct ethical guidelines for telemental-health and by amending those guidelines.

Ethical and practical issues that pertain to the publication of regular e-mail addresses have not been widely recognized in the counseling profession. Most ethical codes that specifically address the topic of internet communications with clients stipulate the necessity of securing those communications so that the confidentiality of information is assured. It is more than hyperbole to suggest that *the use of unsecured e-mail by professional clinicians may be the single most ubiquitous breach of ethics in the history of psychology.*

Awareness is the first priority. In raising these issues, we want to encourage discussion and reflection, both at the level of professional organizations and at an individual practitioner level. As our professions take a closer look at defining ethical excellence in telemental-health, and specifically the use of e-mail, we hope that individual practitioners will also be inspired to take action to select and utilize appropriate security technology. Technological solutions do exist. The truth is that it would not be too difficult for a knowledgeable hacker to monitor, steal, and publish a sensitive e-mail going into or out of a counseling office. As the case example above suggests, an angry former spouse could do a great deal of damage to both their former partner and to the counseling profession as a whole with such a simple act. It is incumbent on us to make sure that this kind of disaster simply cannot happen.

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Chapter Eleven

Cultural and Global Linkages of Emotional Support Through Online Support Groups

Juneau Mahan Gary

Computer technology is altering the way people cope with emotional distress. Computers enable people worldwide and from all cultural groups to give and receive emotional support when it may be culturally stigmatizing to seek face-to-face support or when support services are limited or nonexistent (McFadden & Jencius, 2000). Historically, people discussed emotional distress with someone they knew; with someone in a similar situation; with a shaman, spiritual, or indigenous healer; with an acupuncturist, clergy, or mental health professional; or did not discuss the issue at all. Now, they can reside in remote or sequestered locations (e.g., Greenland or Fiji), in inaccessible locations (e.g., the Australian Outback or U.S. military bases on Guam or in Alaska's tundra), or in underserved locations (e.g., Bangladesh or Appalachia) and seek emotional support online. (Finn, 1996).

Since the 1980's, people have been seeking support for their emotional distress with others in anonymous cyber group settings called online support groups and online self-help groups. The popularity of these online groups, henceforth called online support groups, has soared because of increased access to reasonably priced computers and advances in technology. The online support group is a growing cyber service that utilizes a computer and a modem connection to the Internet. People communicate with others who are experiencing common issues such as coping with physical abuse, HIV, sexual assault and the devastation of natural disasters, terrorism, or war, to mention a few. They participate with a level of safety, privacy, and control from the comfort of their home, public or university library, community center, or computer center.

Online support groups attract a broad range of participants. They vary in age, occupation, gender, and marital status and discuss diverse issues; most are Caucasian (Davison, Pennebaker, & Dickerson, 2000). The range of participation is broader than the YAVIS-type client (young, attractive, verbal, intelligent, successful) (Schofield, 1964) who has the financial resources and time to benefit from traditional Western face-to-face psychotherapy (Hughes, 2000).

Research has been conducted on online support groups using YAVIS-type subjects and non-YAVIS-type subjects and analyzed their use of online support groups. Research on non-YAVIS-type subjects includes teenaged mothers (Dunham, Hurshman, Litwin, Gusella, Ellsworth, & Dodd, 1998); people with eating disorders (Winzelberg, 1997); and survivors of breast cancer (Weinberg, Schmale, Uken, & Wessel, 1996) while research on YAVIS-type subjects was conducted with social workers with occupational stress (Meier, 1997). Teen mothers, for example, may not have perceived themselves to have sufficient time to attend traditional face-to-face support groups while those with breast cancer, for example, may have resisted traditional support groups in order to avoid family shame or dishonor or to avoid community or familial isolation and stigmatization (Wu, 1999). Thus, online support groups can be attractive to a group of new users who may have previously resisted peer support because of culturally-ingrained traditions of non-disclosure of "family secrets"; because of medical, financial, or transportation constraints that thwarted convening face-to-face; because of feeling too overwhelmed to join a peer support group; or because peer support groups are culturally inaccessible.

In addition to the demographic diversity of online support groups, the free service attracts participants. The combination of a lack of a financial commitment, the freedom and privacy to participate outside of one's medical insurance provider, and the absence of family involvement in financial or insurance business (i.e., parental or spousal insurer signing insurance forms and agreeing to make co-payments) promotes privacy and independence. These financial incentives, plus diverse demographics among participants, appear to broaden the base of non-YAVIS-type users in online support groups.

In this chapter, the importance of cultural awareness, cultural sensitivity, and cultural stigmas related to seeking emotional support through online support groups is discussed. Pertinent cultural issues include influence of a Western value system, cultural issues for group leaders, cultural benefits, and cultural limitations as well as an overview of online support groups. It is assumed that the reader possesses basic computer skills and understands computer terminology but may be unfamiliar with the cultural issues of online support groups.

Research and Online Support Groups

Although current research on the efficacy and perceived usefulness of online support groups is limited, it is critical to determine if they offer the therapeutic features of face-to-face support groups. Preliminary research is suggestive of positive comparisons and comparable effects (Davison et al, 2000; Harris-Bowlsbey, 2000). In four studies, online support group participants reported feeling supported and connected to others who shared similar issues (Dunham et al., 1998; Weinberg, Schmale, Uken & Wessel, 1995a; Winzelberg, 1997; Meier, 1997). For instance, in one online support group for people with eating disorders, Winzelberg (1997) reported that 31 percent of members disclosed personal distress, 23 percent gave information (but 12 percent of the information was inaccurate), 16 percent gave emotional support, and 15 percent sought help unrelated to eating disorders. Weinberg, Uken, Schmale, and Adamek (1995b) concluded that several of Yalom's (1995) therapeutic factors had significant therapeutic benefits in one online support group for cancer survivors. In particular, the three therapeutic factors of *instillation of hope*, *group cohesion,* and *universality* were deemed the most active of all therapeutic factors and were especially beneficial for the cancer support group members. These therapeutic factors contributed to the online support group's bonding and perceived helpfulness.

In addition to positive research results, most participant self-reports were positive. Participants perceived online support groups as being helpful, validating, and supportive, and most would not continue to participate without some perceived benefit (Callahan, Hilty, & Nesbitt, 1998; Meier, 1997). However, dissatisfied participants cited three issues that created a barrier to their participation: (1) an absence of visual, auditory, and interpersonal cues, (2) a sense of isolation for those who prefer face-to-face interaction, and (3) technology problems such as being cut off line (Galinsky, Schopler & Abell, 1996).

Online Support and Western Values

Western values dominate online support groups as well as online mental health services and the Internet. Western tenets and values such as meeting at a specific time for a pre-determined length of time; seeking help outside of one's family and/or cultural group; searching for individualistic solutions; self-disclosing personal problems; communicating openly with strangers; helping each other; and seeking self-help are the foundation of most online support groups. Most participants of online support groups reside in North America (i.e., Bermuda, Canada, Caribbean, Central

America, Greenland, Mexico, and United States) as defined by Encyclopedia Britannica (2000), with Americans representing 50 percent of Internet users worldwide (Ryan, 2000). The terms "American" and "North American" include members of cultural and racial groups that have migrated to North America as well as to native-born North Americans. Europeans are the second largest group of participants (Ryan, 2000).

Western values, in conjunction with a large global base of English-speaking users, result in English as the common language in most online support groups. Consequently, participants must possess the ability to communicate effectively in written English without the aid of non-verbal cues such as eye contact, facial expression, social distance, gestures, vocal tone, style of questioning and timing of responses (Cogan, 1996; Mehr, 1998). Participants and moderators should routinely clarify each other's words and statements in order to maintain accurate communication and reduce cultural and communication barriers (Mehr, 1998). For instance, "to table" an issue has different meanings in the United Kingdom and in the United States, or days of the "weekend" vary in different parts of the world. Precise verbal communication can reduce many cultural and communication barriers.

Online Support

Online support groups offer many features of face-to-face support groups but do so using cyber communities rather than meeting face-to-face. Similar to face-to-face support groups, online support groups can range from serving as one therapeutic component of an intervention plan or comprehensive mental health treatment plan to serving as the sole support system. See Gary and Remolino (2000) for a comprehensive description of the benefits and limitations of online support groups. The nuts and bolts of online support groups are summarized.

Access

Online support groups can be accessed through use of a computer and a modem in conjunction with a major Internet service provider (ISP) such as MSN or in conjunction with a local ISP. Once connected to the Internet, online support groups may also be reached through Internet portals (e.g., Yahoo) or through specialized web sites (e.g., www.psychcentral.com). Major ISPs, large commercial web sites and portals set individual standards and procedures regarding regulations, quality control, crisis management, disclaimers, and training of group leaders.

Format

Online support groups can function in real time (i.e., synchronous groups) and/or through e-mail discussion groups, also called listservs, bulletin boards, or newsgroups (i.e., asynchronous groups). The synchronous format is similar to participating in a telephone conference call that is text-based, whereas the listserv format is similar to sending e-mail and awaiting responses. Davison et al. (2000) and Page, Delmonico, Walsh, L'Amoreaux, Danninhirsh, Thompson, Ingram, & Evans (2000) have documented 40,000 newsgroups and 873,370 listings for *support groups*. Both formats are described.

- *Synchronous Groups* are real time and interactive. They simulate discussions with others using text-based communication. They meet at a scheduled time to encourage consistent participation and convene for one hour on average. They are sometimes called chat rooms but not all chat rooms (e.g., open chats) are online support groups. In online support groups, members receive immediate support, feedback, advice, and/or information. They correspond anonymously and use contrived screen names (i.e., pseudonyms). They take turns communicating and can communicate with the whole room or converse with an individual as others follow the dialogue on their personal computer screen.

Typically, group sessions are not printed and the leader does not maintain session notes. The quality of each session differs and is based on the composition of the group, cohesiveness of the group, relevance of the topic, group facilitation skills of the leader, and participants' pressing issues. An excerpt from a typical online support group session for loss and grief can be found in Gary and Remolino (2000). Samples of online support groups and web sites are illustrated in Table 1 and demonstrate the range of self-help topics.

Table 1. Sampling of Support Groups, Self-Help Groups, and Web Sites.

Addiction

www.addictions.com
www.addictions.net
www.na.org
www.recovery-man.com

Anxiety

www.socialanxiety.com

Crisis Support

www.crisissupport.org

Culture-based

www.nativeweb.com

Depression

www.psycom.net/depression.central.html#contents
www.ndmda.org

Eating Disorders

www.eating-disorder.org
www.addictions.net

Gambling

www.800gambler.org

General Mental Health

www.mhsource.com
www.apa.org/psychnet
www.psychcentral.com
www.mentalhelp.net
http://www.counseling.org/consumers/consumers.htm

Grief/Loss

www.death-dying.com
www.griefsupport.org

Internet Addiction

www.netaddiction.com
www.addictions.com

Self-Help

www.mentalhelp.net/selfhelp

Suicide

www.suicidology.org
www.suicidepreventtriangle.org

Other Sites

Portals and Web Sites

www.yahoo.com (multilingual Yahoo! sites worldwide)
http://boards.webmd.com/roundtable
www.ivillagehealth.com
www.aol.com (multilingual world service sites)
www.msn.com (multilingual world service sites)

Mental Health Resources for Clinicians

http://cybercounsel.uncg.edu
www.behavior.net
www.behavior.net/JOB (Journal of Online Behavior)
www.counseling.org
www.apa.org

In spite of the lack of physical interaction and absence of non-verbal communication, limited expressions of emotions are conveyed symbolically, visually, and in shorthand by emoticons as illustrated in Table 2. Emoticons are strung-together keystrokes that resemble facial expressions when turned 90 degrees clockwise. Emoticons can facilitate the transmission of emotions such as humor or disappointment which may be difficult to communicate in text-only communication or difficult to transmit across cultures and languages (Collie, Mitchell, & Murphy, 2000). Some emoticons transcend cultural differences and may be used more or used less in specific cultures or countries. For example, in Japan where it is important to *save face*, the "frown" in Table 2 should be used sparingly to avoid offending Japanese participants.

Table 2. Cyber Shorthand and Symbolic Expression of Emotions.

Emotions	*Symbols*
Hug to others:	{{{{{{}}}}}}
Hug to the entire room:	{{{{{room}}}}}
Hug and kiss:	{}&**
Smile:	:) and ☺
Frown:	:(
Shorthand	*Symbols*
Long time, no see:	LTNS

Laughing out loud: LOL
Cursing: &!$#*&
Yelling: Capitalize word (e.g., he HATES that)

- *Asynchronous Groups* are posted messages to a specific person or to the general membership. Participants post messages and questions twenty-four hours, seven days a week in listservs or newsgroups. This format allows participants to send and retrieve messages at their convenience and regardless of their time zone. However, responses are delayed while the sender awaits replies and support is not immediate.

Group Leader

Leaders facilitate online support groups in synchronous time and may be called hosts or moderators. Depending upon the site, some hosts are mental health professionals (licensed or unlicensed), while other hosts have no mental health training at all. A mental health degree may not be required (as is also true for some face-to-face support groups) so counseling, also known as online counseling, is not permitted. Instead, hosts function as *resource persons* rather than online counselors. They make referrals to telephone helplines, self-help resources, clergy, face-to-face support or self-help groups, spiritual or indigenous healers, local counseling centers, crisis centers, acupuncturists, and hospice centers, among others. They also recommend links to other online support groups (see Table 1), to resources worldwide (www.na.org/event-reg.htm, Narcotics Anonymous worldwide services), to culture-based web sites (e.g., www.nativeweb.com, a resource for indigenous cultures worldwide), to mental health web sites (e.g., www.psychcentral.com), and to professionally oriented mental health web sites with a focus on international online issues (e.g., Journal of Online Behavior at www.behavior.net/JOB). Hosts will find Grohol (2000) helpful for referrals to mental health web sites.

Moderators also ensure that communication remains focused on the topic and that ground rules (i.e., remain anonymous, take turns, remain focused on the topic, abstain from harassment (e.g., personal criticism, cursing, or name-calling), and maintain confidentiality) are enforced. Violators of the ground rules can be sanctioned. Each ISP, portal, or web site maintains a "Terms of Service" contract that outlines appropriate online behavior, explains how violations are handled and metes out sanctions. For example, Alcoholics Anonymous' "Netiquette" advisory and bylaws (http://www.aa-intergroup.org/html/faq.html#13) describe appropriate online behavior.

The appropriate screening and training of moderators enables them to facilitate basic helping skills and referral skills as well as facilitate group interaction (Sampson, Kolodinsky, & Greeno, 1997). Prospective moderators can be screened online to determine their interpersonal skills and their ability to facilitate group interaction. Once selected, they are typically trained online using a distance learning model of training. Typically, experienced moderators mentor newly trained moderators.

Ethical and Legal Concerns

The moderation of or participation in online support groups raises some ethical and legal questions that currently remain unanswered. The online support group, often hosted by non-mental health professionals as previously discussed, is not considered an online *mental health* service as defined by most national and state/provincial statutes, mental health professional associations, and mental health licensing boards. Consequently, mental health standards, statutes, and regulations that were designed to protect consumers of mental health services are not applicable to non-professional moderators.

Several mental health professional organizations and licensing boards, including American Counseling Association (ACA), American Psychological Association (APA), and National Board of Certified Counselors (NBCC) are grappling with the ethical and legal issues raised by the gamut of online mental health services (Lee, 1998; Bloom, 1997; Bloom & Walz, 2000). Online mental health services function without regard to geographic borders or local, national, or international regulations, making legal mechanisms of resolution awkward for legal liability, dispute resolution, and professional discipline (Lee, 1998). In 1999, the American Counseling Association approved "Ethical Standards for Internet On-Line Counseling" (http://www.counseling.org/resources/internet.htm) to be used in conjunction with the "ACA Code of Ethics and Standards of Practice." The new ACA Standards for online counseling limit online counseling to the state in which the professional counselor is licensed, the state in which the client resides, and the client's state must license professional counselors. However, online support groups are not considered to be an online counseling service offered by professional counselors and are not included in the new ACA Standards for online counseling.

Comprehensive revisions of mental health statutes and ethical standards will require the coordination of all mental health disciplines and state, federal, and international agencies. The professional organizations and licensing boards must address all components of online mental health services regarding qualifications, compliance, boundaries of competence, and supervision (Bloom, 1997; Lee, 1998; Bloom & Walz, 2000).

Cultural Issues and Online Support

As computer and electronic technology connect people residing in the vast majority of countries and in remote regions, the world increasingly becomes a "global village" instead of many disparate communities (Cogan, 1996). Contact with people from other countries and cultures fosters a pluralistic society of racial, religious, ethnic, cultural, and linguistic backgrounds (Brill, 1995; Mehr, 1998; Gladding, 1997; McFadden & Jencius, 2000). As participants support each other worldwide, they can learn from the diversity of perspectives offered by other participants. Examples of multilingual support groups, self-help groups, and web sites are illustrated in Table 3. The exposure to diverse cultural values encourages the "trying on" of other cultural perspectives and creates the potential to alter one's stereotypes, prejudices, and ethnocentric views (Bowman & Bowman, 1998; Chan, 1999). The diversity highlights the fact that the cultural perspective and value system espoused in European-American/ North American/Western society is just one of *many* value systems and perspectives worldwide (Mehr, 1998). Such insight can promote creative problem solving for participants who may feel vulnerable, isolated, or misunderstood.

In the global village, incidents that were once considered local community dramas are now witnessed by people in other parts of the world through global news coverage. Tragic events or natural disasters such as the terrorist attacks of September 11th in the United States in 2001; the fatal floods in Mozambique in 2000; explosion of the Russian submarine in the Barents Sea in 2000; fatal school shootings at Columbine High School in Littleton, Colorado in 1999; bombings of the American Embassies in Kenya and Tanzania in 1998; and the death of Princess Diana in 1997 demonstrate this point. Such traumatic incidents produce a range of emotional reactions from anger to anxiety, depression, and fear in people worldwide based on their cultural perspective and worldview (Swartz-Kulstad & Martin, 1999). Their reactions, in turn, influence the type of support that they seek or give through online support groups, especially if local or onsite support is limited or non-existent (Kimwell & Heaps, 1999; Walker, 1999).

The American Embassy bombings killed or injured mostly Kenyans and Tanzanians, yet Kenya and Tanzania had few, if any, grief support networks or psychological support systems to assist victims and rescuers in coping with emotional distress (Kimwell & Heaps, 1999). "There may be only one psychologist, psychiatrist, or social worker for every one million people, and...psychotropic medication is virtually unavailable" (Kimwell & Heaps, 1999, p. 1). Religious and kinship relationships may have eased short term distress but the long term emotional trauma remains unaddressed. Furthermore, passersby in Kenya and Tanzania who rescued victims (and who were untrained and unprepared for the emotional consequences) experienced nightmares and intense emotional reactions that also remain unaddressed (Kimwell & Heaps, 1999). Since emotional support is limited or unavailable locally, residents of Kenya and Tanzania who have access to computers and modems could seek emotional support online with others worldwide who are grieving these same Embassy bombings and other catastrophes.

In most countries, only a small segment of the population may have access to computers and therefore access to online support groups. Those online participants with access to computers may differ from fellow countrymen based upon their economic, resident (e.g., expatriates), or social status, in their worldview, and in their understanding of and ability to use non-traditional and non-culturally-based methods, such as online support groups, to seek support.

All participants bring culturally-based life experiences, coping mechanisms, personal attitudes, biases, beliefs, and knowledge that influence their ability to seek help. These cultural influences affect what is culturally appropriate to discuss beyond family boundaries as well as how and when to seek help (Wu, 1999). For instance, some topics discussed in online support groups are culturally taboo to discuss face-to-face in specific cultures or countries. Such topics could include pregnancy, family violence, sexually transmitted diseases (STDs), suicide, abortion, value of male versus female children, HIV, birth spacing, death, use of contraceptives, breast feeding, arranged marriages, and gender-based division of labor, among others.

Cultural Issues for Hosts and Moderators

Hosts who are culturally competent and knowledgeable about various cultural systems and values are more likely to be effective in leading a culturally diverse online support group. Cultural competence does not require familiarity with *all* cultural rituals, values, resources, or perceptions worldwide; this would be an impossible task. It *does* however, require a respect for and understanding of culture and its impact upon participants as well as the acceptance of cultural differences within the online support

Table 3.Sampling of Multilingual Support Groups, Self-Help Groups, and Web Sites.

Site Name	Internet Address (URL)	Comments
Counseling and Support in Japan	http://www2.gol.com/users/andrew/	• Information on support groups and counseling services for people residing in Japan • Japanese and English languages • Requires a download of *Japanese Text Display System* • Use *Internet Explorer* for best results
Narcotics Anonymous (NA) World Services	www.na.org/event-reg.htm	• International meeting search locates NA meetings world wide and in various languages
Online Intergroupof Alcoholics Anonymous (AA) (OIAA)	www.aa-intergroup.org	• Serves all online AA fellowship groups • Online services for synchronous and asynchronous groups • Real time online groups in 7 world languages • E-mail services in 11 world languages • "Sounds of Sobriety" (SOS) online services for members who are deaf and hearing impaired
Un Camino Espiritual (A Spiritual Journey) (NA)	www.nuestra-net.com/camino	• Online NA e-mail support groups • Spanish language

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group (Brill, 1995; Gladding, 1997). Specifically, moderators must transcend communication and cultural barriers in order to be effective across cultures and maintain open relationships as well as present culturally acceptable solutions and offer culturally appropriate support and interventions. They must be aware of the relevance of and appropriate use of indigenous support systems; must understand how cultural systems operate and influence behaviors; and should inquire about participants' traditional cultural helpers. As a point of clarification, physicians are frequently consulted in Asian -American communities for emotional distress since it is culturally acceptable to be physically ill, even if the illness results from the person suppressing and denying distressing emotional reactions and somatizing the emotional distress (Vogel, 1999). Thus, Asian-Americans may initially join an online support group under the guise of medical concerns rather than emotional support. In such cases, the culturally competent host can encourage participants to be receptive to other forms of cultural support and coping styles that are perhaps a stretch beyond the participant's current level of cultural comfort.

Co-leading by two culturally competent hosts might ensure that cultural subtleties are attended to while group needs are also met. Co-hosts' abilities to "read" the situation and "read" participants from a cultural perspective contributes to the perceived usefulness of culturally diverse online support groups (Brill, 1995).

No Global Village In My Backyard: Socio-Political Realities

Although the Internet is global, leaders of a handful of countries shun it. Leaders of countries such as Saudi Arabia, China, Cuba, Iraq and North Korea censor, regulate, monitor, or outright forbid Internet use by citizens (CNN, 1998, 1999a, 2000). Customarily, leaders of these countries do not tolerate the free exchange of ideas and support that the Internet makes possible through online support groups and other Internet services. Such governmental control makes participation in online support groups virtually impossible for citizens of certain countries.

In China, for example, chat rooms, newsgroups, and bulletin boards need government approval to operate and all web site information must pass a security check (CNN, 2000). Violators are punished. Further, Chinese authorities plan to establish an official government body to regulate and monitor all Internet content. This will most likely threaten anonymity in online support groups. Other countries such as Saudi Arabia plan to legitimize the Internet but foreign publications and outside information will be strictly censored and controlled to block politically, socially, or culturally sensitive sites (CNN, 1998). Finally in Iraq ownership of a computer modem (necessary to access online support groups and e-mail) is illegal (CNN, 1999a). Thus, citizens of some isolated countries *cannot* participate in online support groups, even if they own a computer and in spite of their emotional distress or need for emotional support. The expatriate community residing in countries such as these can usually circumvent local governmental censorship and monitoring.

Cultural Benefits And Limitations Of Online Support Groups

Before describing the cultural benefits and limitations of online support groups in this section, readers should note that nearly every perceived benefit by some is a perceived limitation by others. Personal circumstances, worldview, cultural values, and access to computer technology influence one's perception of a benefit or a limitation.

Cultural Benefits Of Online Support Groups

The benefits of online support groups as they address cultural issues include increased access to support, specialized online support groups, Internet time, universality as a therapeutic factor, and privacy. Each benefit is discussed.

Increased Access to Support

Online support groups provide support and camaraderie to people for many reasons, in different ways and at a convenient time based on *each participant's* time zone (Sussman, 1998; Weinberg et al., 1996). They enable people to seek support from a wide variety of perspectives when feeling vulnerable and increase their access to support services if and when support is not available in their country, cultural group, or geographic region. For example, the web site "Counseling and Support in Japan" (at http://www2.gol.com/users/andrew) provides information in Japanese and English about support groups and counseling services for people residing in and relocating to Japan. Web sites and support groups such as this one reduce the sense of isolation for those who reside abroad and confront a vastly different culture and language, for those who seek peer or professional support that may be stigmatized in the country, for those who reside in underserved or remote locations, for those who are housebound, or for those seeking anonymity (Finn, 1996; Sussman, 1998). Finally, Internet access at a library, computer center, or community center enables people who cannot afford to purchase a computer to participate online as an equal member without financial resources becoming a barrier (Lee, 2000).

Participants focus exclusively on pertinent needs and issues rather than on distracters such as physical attributes, linguistic accents, or social status because members are faceless, genderless, raceless, religionless, ageless, and classless, unless *they* choose to disclose such personal information. The absence of distracters reduces some of the prejudices and barriers that limit social interaction based on demographic and personal characteristics (Bowman & Bowman, 1998). For instance, the absence of demographic characteristics and physical attributes enables a Palestinian man and an Israeli man to support each other and develop an online relationship but the same support and relationship would most likely never occur face-to-face in Israel.

Unlike synchronous online support groups that offer support at a specific time, the listservs offer support twenty-four hours daily. Listservs are beneficial for several reasons, including support can be sought when a participant is most vulnerable; when a participant needs a great deal of support that relatives, friends and their local community cannot provide; and when a participant has limited available time (e.g., before or after others are asleep or others are at work or school) (Finn, 1996).

Specialized Online Support Groups

Since online support groups are not limited by geographic boundaries, groups dedicated to specialized topics, age groups, or gender groups can be formed successfully from a global population. Furthermore, some online support groups may need to be age-specific and/or gender-specific in order to accommodate to cultural mores, attract participants, or focus on specific issues. Consider the following three examples:

(1) older adults may be uncomfortable discussing thoughts of depression or suicide with younger adults, believing that youth are not culturally appropriate individuals to dispense advice and support. They would seek an age-specific online support group;

(2) young adults may benefit from age-specific online support groups to discuss contraceptive use or arranged marriages; and

(3) female only online support groups may support women coping with sexual or physical abuse.

Topics such as these are taboo to discuss in some cultures and countries and are considered family secrets that will bring shame to the family if disclosed publicly. For example, in Japan, women do not typically discuss or seek help for domestic violence or sexual assault (Kuzo, 1999). Therefore, anonymity through cyber space may reduce Japanese victims' inhibitions and isolation and increase emotional support without bringing shame to the family.

Horne (1999) describes the emergence of online international women's groups for social activism and advocacy. These member-led groups contribute to and create a progressive internationalism that challenges the status quo of women and initiates change around the world. This is the next step in the evolution of groups for and by women. One group, Women's Eyes on the World Bank, monitors and advocates for women's needs at the World Bank. This group cited the World Bank's inattention to gender equity. In response, the World Bank established a Policy Research Report on gender and an ad hoc non-governmental committee to initiate a process for change (Horne, 1999). Another group, Models of Social Action Involving Communities (MOSAIC) is a non-profit organization that works with local and global women's groups. MOSAIC members exchange information, support women, and create coalitions around issues that women determine to be vital to their region. MOSAIC members supported women's groups in Hungary (i.e., Women for Women Against Violence) and in Russia (i.e., Russian Association of Crisis Centers) (Horne, 1999).

"Internet Time"

Internet time is a relatively new global concept of time. Increased use of the Internet has raised interest in new ways of measuring time. The Swatch Group of Switzerland devised Internet time as a new universal system of time to replace Greenwich Mean Time (GMT) and to transcend time zones by making the time of day the same across all time zones (CNN, 1999b). Internet time is advantageous when scheduling online support groups and arranging online teleconferences (CNN, 1999b).

In Internet time, the day is divided into 1,000 "beats" per 24-hour cycle and each "beat" is equivalent to 1 minute and 26.4 seconds. Internet time is designated by "@" preceding a number (i.e., time of day) between 0 and 999. A day of Internet time begins at @000 Biel Meridian Time (BMT), the Swatch meridian in Biel, Switzerland, where @000 is midnight and @500 is noon. One's local time would operate on BMT but @000 would not be midnight. For instance, if an online support group convenes at @125, then in New York City, Los Angeles, and Biel, the equivalent times for @125 would be 8 p.m., 5 p.m., and 3 a.m. respectively although @125 is the Internet time for all three locations. Internet time may appear awkward initially and the average person may be reluctant to convert but the new time concept facilitates cyber connections across time zones.

Universality as a Therapeutic Factor

Others struggle too. This is not always evident to an emotionally distressed person who often wallows in isolation. Isolation may be exacerbated by geographic isolation or by cultural traditions that reinforce suffering in silence. Universality, one of Yalom's (1995) therapeutic factors, unites participants as they share similar thoughts, feelings, fears, and/or reactions with their online group. As participants share and support others, they realize that distress is a part of life, they feel validated, and they heal as they learn to cope from others.

Privacy

Online support groups give participants the privacy to seek support and information about behavior that might be perceived as a cultural and/ or familial stigma and thereby become a barrier to accessing support and/ or information. Further, in a face-to-face support group or other culturally accepted face-to-face support system, one's social status in the community might be jeopardized and/or family name shamed and thus inhibit participation. Anonymity protects participants' identity and/or family name and helps to overcome some of the social and cultural barriers without participants fearing ridicule, cultural stigmatization, or vulnerability within the community (Wu, 1999; Day & Schneider, 2000).

While privacy facilitates communication for some, it should not be taken for granted by others. In the United States, as an example, privacy in the work place may be compromised because the employer may be legally entitled to monitor computer activity and transmissions (Hughes, 2000). A participant should minimize participation in online support groups on an employer's computer, during the lunch hour or after business hours for example, to maintain privacy. Participants in other countries should become acquainted with their country's privacy laws.

The sharing of computers raises other privacy issues when the participant is known within a circle of employees or in a household. If employees share a business computer, other employees may be able to read listserv messages or transcripts from an employee's support group. Moreover, one computer per household is common. Thus, if a computer is shared with family members, they too may be able to read private messages or transcripts. Participants using a shared computer at work or at home should join online support groups that require a password to participate, use a secure site, or use encryption software prior to self-disclosing.

Cultural Limitations of Online Support Groups

Limitations of online support groups as they address cultural issues include governmental control, limited feedback, limited and/or incompatible support, breaches in anonymity, quality control, members with limited English language skills, differing stages of group development, and hoax perpetuations. Each limitation is discussed.

Government Control

Governmental leaders in a small group of countries censor or forbid Internet access by citizens. Such governmental regulation makes participation in online support groups impossible or illegal, hampers support, and/or compromises anonymity. The expatriate community is usually exempt from local governmental control.

Limited Feedback

Online support groups enable participants to "hide" emotionally and interpersonally behind computer screens (Sampson et al., 1997; Spinney, 1995). The lack of face-to-face contact obscures vocal intonations and verbal and non-verbal cues, including body language and expressions of emotion. Limited feedback may require changes in a participant's habitual patterns of interaction and thinking in order to overcome this limitation (Day & Schneider, 2000). To partially compensate for the interpersonal limitations, for example, participants use text-based shorthand to convey certain emotions and these are illustrated in Table 2. Dissatisfied participants typically cite limited feedback as a disincentive to participate (Galinsky et al., 1996).

Although a participant may initially feel uncomfortable with limited emotional and visual feedback, such limitations may, in time, be overcome. Those with cultural barriers that stigmatize or inhibit open discussions about emotional distress or those with interpersonal difficulties may perceive limited feedback, reduced interpersonal intimacy and decreased emotional intensity as *incentives* to participate. They may not feel pressured to take personal and interpersonal risks as they might experience in face-to-face support groups where their identity and/or family name may be recognized and shamed (Weinberg et al., 1995a; Wu, 1999; Casey, 2000). The lack of interpersonal pressure, coupled with the ability to participate gradually at one's own comfort level, and the freedom to offer honest feedback without feeling inhibited or embarrassed, may increase participants' self-confidence as they self-disclose, become assertive, set boundaries, and support others at their own pace (Lee, 2000; Day & Schneider, 2000).

A Panacea?

Online support groups are not appropriate for everyone and are not a panacea. Some participants may need additional medical, educational, social, and/or mental health services or may need a consultation with a spiritual or indigenous healer, clergy, shaman, or acupuncturist. Furthermore, limited feedback, as previously discussed, makes the assessment and referral process difficult and awkward for the host, especially when the host is unfamiliar with services available in the participant's country or geographic region.

The isolating, mechanical, and individualistic nature of seeking help and support from a Western perspective and through a computer may feel unnatural to members of some cultural groups, especially for those cultural groups with a collective worldview (Bowman & Bowman, 1998). Face-to-face and group interactions tend to be valued and preferred by Asian-Americans, Latin-Americans, and Native-Americans, to mention a few (Sue & Sue, 1990). The Western value of equating emotional support with computers and self-disclosure (i.e., self-disclosure + computer = emotional support) may be incompatible with the worldview of some cultural groups.

Anonymity Breaches

Steps are taken to maintain the anonymity of each participant as well as the anonymity of group dialogue. Moderators promote anonymity by discouraging the exchange of *identifying* information as well as send links and other requested information to a participant's e-mail address rather than to a residence. Moderators must remain abreast of current advances in computer security to ensure participants' privacy and anonymity. They should consider using a secure site and encryption software to protect the transmission of personal information and to thwart breaches.

In spite of computer security procedures, anonymity can be breached and dialogues can be intercepted (Lee, 1998; Sampson et al., 1997; Sussman, 1998). Participants must consider the risk of a breach in anonymity before joining an online support group, must weigh the benefits against the risks when accessing services, must understand limits of privacy, and are advised to limit the disclosure of personal and identifying information during the registration or orientation process. In summary, *caveat emptor* (or buyer beware).

Quality Control

The quality of online support groups varies. Each sets its own standards, procedures, and training programs for hosts. Locating an appropriate online support group may be haphazard because there is no master plan or repository to organize and identify sites. Moreover, sites are unreliable for longevity and consistency. They appear, disappear, or are purchased by another site and may change their URL address.

The competency of moderators varies as well. The experience and professional qualifications (or the lack of) for moderators vary among web sites, portals, and ISPs. A new participant might assume incorrectly that hosts are trained in a mental health or helping discipline. Therefore, it is incumbent upon each new participant to evaluate the appropriateness of a specific online support group by inquiring about the professionalism and training of a host, among other criteria. Moderators should state their professional qualifications (or indicate none) and address their cultural competency at the beginning of each session, or during orientation, while not divulging their true identity. Information about the moderator's training and education may help the participant to gain insight about the moderator's competence, value system, cultural competence, and worldview. For example, a moderator who is raised and educated in Australia will most likely have a worldview different from a host raised and educated in Costa Rica. Therefore, the new participant is advised to try several online support groups in search of the best fit.

Members with Limited English Language Skills

Since English is the most common language used in online support groups, the participant should be fluent in expressive and receptive written English. The rapid pace, text-based communication, and simultaneous dialogues may frustrate participants or moderators with language limitations (such as English as a second language or a learning disability). The participant with limited English may be challenged in communicating feelings and thoughts verbally to others without relying on body language and other non-verbal communication to compensate for any verbal deficits (Day & Schneider, 2000). Conversely, others may be challenged to respond in a supportive and helpful manner if they are unable to comprehend the participant's needs. In a text-only format with limited interpersonal feedback, communicative misunderstandings are common for all participants and could be exacerbated for the participant or host with limited English. If the moderator suspects a participant is struggling with English language limitations, the moderator should role model a different level of vocabulary and check with participants periodically to ensure comprehension and accurate expression.

Participants with learning disabilities or physical disabilities that limit dexterity such as cerebral palsy may benefit from software programs that convert spoken word to text and vice versa. Continuous speech programs

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enable participation by the dictation of responses and speech synthesis programs translate written text from the computer into speech (Sachs, 2001).

Differing Stages of Group Development

Meier (1997) evaluated one online, stress management, asynchronous support group for social workers. She observed that participants experienced group cohesion and functioned in the working or action stage of group development (Corey & Corey, 1997; Yalom, 1995). Specifically, in the study, the structural complexity of messages increased over time, tended to be longer, and addressed many issues. Unfortunately, research designs do not mimic real world conditions and researchers have no control over the number and type of subjects and topics as well as subjects' occupations and ages, among other variables.

Real world online support groups are unable to maintain the working stage of group development for extended periods (Corey & Corey, 1997). Most are open continuously to new membership. In addition to new participants joining an established group, other online participants may log on or log off at any time during a session. Such fluctuations in membership make it difficult for online support group participants to engage in the typical group phases of warm-up, action, and closure (Hulse-Killacky, Kraus, & Schumacher, 1999; Corey & Corey, 1997). This limitation reduces the efficacy of online support groups as a sole support source for some participants and warrants online support groups as being one component of a larger culturally relevant support system.

Crisis Management

The successful resolution of an emotional crisis in cyber space can be a challenge. Limited feedback and lack of sufficient information make an immediate crisis referral difficult, especially when the host may be unaware of participants' geographic locations around the world, their specific needs, or local resources.

Hoax Perpetuation

People with unscrupulous motives can deceive an online support group about the extent and/or severity of their experiences and emotional distress. Hoaxes are most commonly perpetrated by new, anonymous participants who lack an emotional commitment to other participants in the online support group. Deceptions occur when the perpetrator purposefully communicates distorted or inaccurate information or purposefully withholds relevant information such as not disclosing a history of pedophilia or other sexual misconduct to a teen support group, for instance. Deceptions are most obvious when details are scarce, when inconsistencies emerge, and when a participant expresses unbelievable experiences or multiple or horrific experiences (however, on occasion, such occurrences are truthful). Participants from cultural backgrounds that respect the opinions of others or do not confront others, especially strangers, may be vulnerable to purposeful deceptions.

Omissions or scarce details may not always represent a purposeful hoax. Instead, vague statements or omissions may result from socio-political barriers (e.g., fear of governmental monitoring and subsequent identification and/or arrest), cultural assumptions or mores (e.g., discretion about private or family affairs), learning disabilities, or limited English skills.

An experienced moderator may suspect a ruse but be unable to decipher the truth immediately. Hosts must demonstrate cultural sensitivity to evaluate if the suspected ruse stems from cultural differences or linguistic limitations, or if the suspected hoax is authentic. If the host suspects cultural or socio-political differences, consider terminating the exchange and focus on another issue if the participant might be in danger of family or governmental reprisal. If the host suspects linguistic limitations, consider clarifying the participant's concerns. Finally, if the host suspects an authentic hoax, continue to support the suspected violator by listening for inconsistencies before confronting and referring to the "Terms of Service" agreement. ISPs, portals, and web sites typically lack strong consequences to punish the violator, except to limit access to online services.

Conclusion

Culturally diverse online support groups pose opportunities and new challenges, especially for those interested in multicultural and international mental health issues. Online support groups have the potential to improve the access and delivery of services to a wide range of people who reside worldwide, including some who would not seek support at all for cultural reasons. They provide an alternative vehicle of support for people in distress by linking people with similar issues, reducing the sense of isolation, and increasing feelings of validation when it may be culturally stigmatizing to seek face-to-face support. However, online support groups are not appropriate for everyone nor can everyone worldwide access online support groups.

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Acknowledgments

Portions of this work were presented at the Seventh International Counseling Conference, Sydney, Australia, December, 1998 and this work is an expanded version of an ERIC digest.

Special thanks to Melvin L. Gary and Carol Weiss for their useful comments on drafts of this work.

Chapter Twelve

Implementing Internet Web Sites in Counseling Services

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Counseling can be delivered in a face-to-face mode as well as in a distance mode using the telephone or the Internet (National Board for Certified Counselors and the Center for Credentialing and Education, 2001). Internet Web sites can support counseling provided to clients as well as support self-help resources provided to individuals. Potential contributions of Web sites to counseling can include marketing counseling services to potential clients, orienting clients to counseling, delivering assessments, and delivering information used as homework assigned to clients (Sampson, 2000; Sampson, Kolodinsky, & Greeno, 1997). Web sites can also be used to help clients understand and gain access to distance counseling. Web sites can support the delivery of self-help resources to individuals by providing access to self-assessments, by providing access to information, by indicating when counseling may be needed, and by providing help features that link users to immediate assistance when needed (Offer & Sampson, 1999).

Web sites that support counseling and the use of self-help resources are often used as an integral part of services delivered by organizations. Given the organizational context of these Web sites, effective implementation of these sites within organizations contributes to the overall quality of available resources and services. This chapter presents a seven-step model for implementing Internet Web sites within organizations that deliver counseling and self-help resources. The chapter begins with a discussion of the use of implementation models to enhance service delivery and continues with a description of a seven-step implementation process and an acknowledgement of the continuing nature of implementation. The chapter concludes with suggestions for maximizing staff collaboration in implementation.

The Use of Implementation Models to Enhance Service Delivery

Experience with computer applications in counseling and career services has shown that poor implementation limits the effectiveness of service delivery. Specific implementation problems have included poor planning, poor integration of computer applications within service delivery organizations, inadequate staff training, and staff anxiety and resistance (Sampson, 1984; 1996; Sampson & Norris, 1997). The purpose of an implementation guide is to reduce complexity thereby making the process comprehensible enough to motivate practitioners toward investing the necessary time and energy in implementation. Ultimately, more effective implementation can lead to better use of higher quality resources and services by clients and individuals.

The authors favor the implementation model described in this chapter because it has four potential strengths. First, the model is intended to be flexible enough to be partially or completely applied, depending on the staff time available. Second, the model can be used to support both initial and ongoing Web site implementation. If the Web site is being implemented for the first time, this model can be used as a starting point for the design and use of the site. If the Web site already exists, this model can be used to consider options for enhancing the design and use of the site. Third, the implementation model is designed to account for differences among each counseling and career service's clients, staff, organization and resources. Finally, practitioners can use this model as a starting point for creating a brief (or more complete) implementation plan for a specific counseling or career service. We believe that it is better to create a brief plan that improves over time, rather than overwhelming practitioners with an unrealistic implementation plan that leads to frustration when goals are not achieved.

The inherent assumptions of this implementation model are that: 1) Good planning improves the design and use of Web sites; 2) Some planning is better than no planning at all; and 3) Implementation is a continuing process that can improve over time. The seven sequential steps of the implementation model are noted in Figure 1 and are described below. The size of the box for each of the seven steps in Figure 1 indicates the relative time and effort that is needed for each step.

A Seven-Step Web Site Implementation Process

The Web site implementation model described in the following section includes: 1) program evaluation, 2) Web site development, 3) Web site integration, 4) staff training, 5) trial use, 6) operation, and 7) evaluation.

Program Evaluation

This step provides the foundation for the implementation process, helping to ensure that the Web site is used for the right reasons by the right clients. The process begins with an evaluation of how well the current resources and services of the organization are meeting the needs of clients and individuals. If the evaluation indicates that a change in resources or service delivery is necessary, then the features of typical Web sites are reviewed. If a new or revised Web site seems appropriate, the organization then prepares for the implementation process by establishing an implementation committee and a Web site coordinator to guide the process. An implementation plan is prepared and support is sought from stakeholders and administrators for the use of the Web site.

Web Site Development

Using the above program evaluation data, this step helps to ensure that the Web site developed has the potential to effectively meet client and organizational needs. The process begins with preparation for Web site development (reviewing other designs and agreeing on staffing and budgeting). Next, the staff of the organization collaboratively develops the content of the site. Audiences, needs, and related resources can be delineated using the exercises in Panke, Carr, Arkin, & Sampson (2001). The next step in the process is the development of Web site features. Here decisions are made about design features, which are prototyped, evaluated, revised, and then implemented. See Sampson, Carr, Panke, Arkin, Minvielle, & Vernick (2001) for recommendations on Web site design. Elements of the "Develop Web Site Features" phase can be initiated while the "Develop Web Site Content" phase is being completed. When the site becomes operational, users, staff, and stakeholders evaluate Web site content and features. Finally, the ongoing documentation of the site is completed as the site becomes finalized for initial release.

Web Site Integration

Given the Web site developed in the previous step, staff now plan how to integrate Web site use in a way that is congruent with the way in which resources and services are delivered within the organization. The process begins with the staff reviewing current needs and current resources and services. All staff become familiar with the Web site and then evaluate how the system "fits" with existing or new services. A plan is then developed for connecting the Web site with other organizational resources and services. The roles of all staff members are examined, including specific professional, paraprofessional, and clerical support staff interventions with clients. Operational procedures are determined, and a plan for evaluating Web site use is prepared.

Staff Training

Staff are now given the training necessary to integrate the Web site with existing service delivery. The process begins with developing a plan for training. Professionals, paraprofessionals, and clerical support staff then receive specific training that is appropriate for their role in delivering services. Administrators and stakeholders are then familiarized with Web site features and use. The effectiveness of training is then evaluated with plans made for future training activities.

Trial Use

The effectiveness of the Web site in actual practice, based on the software integration and staff training efforts completed above, is evaluated with a group of trial users. (In this paper, "users" refers to either clients using a Web site as part of a counseling intervention or individuals who are using a counseling or career center Web site as a self-help resource.) The process begins with an identification of trial users from the audiences that the Web site is intended to reach. As trial users explore the Web site, their observations and critiques are recorded and evaluated. Based on observations and interviews of trial users, the Web site design, staff roles, operational procedures, and training efforts are modified as needed.

Operation

Building upon the experience gained in the trial period, the Web site is used as one component of the total service delivery effort of the organization. Audience members have daily access to the Web site and the resources and services that it presents. Staff members continuously maintain the Web site's content and features. Evaluation data is collected and public relations efforts continue. Responding to this data and feedback from public relations campaigns provides an important source of evaluative data that can be used in the next step.

Evaluation

Building upon the experience gained during operation, results of the evaluation are used to indicate needed improvements in Web site design and use. Information gained in this step is then used in the refinement of service delivery. Depending on the nature of the evaluation results obtained and the resulting changes that are needed, the implementation process cycles back via feedback loops to program evaluation, Web site development, Web site integration, or staff training, followed by trial use and continuing operation of the Web site. December (1996) noted that the innovation process entails the continuous cycle of making changes to the site to achieve the evolving needs of users.

Specific components of each of the seven steps of the model are presented in Table 1. The implementation committee and Web site coordinator can review this checklist and select the components of the Web site implementation plan that are appropriate for the organization. Details of each of the seven steps of the model are presented in Sampson et al. (2001).

The Continuing Nature of Implementation

Implementation is an on-going process. Counseling and career services offered to individuals evolve in response to changes in public policy, individual needs, funding, organizational development, and available assessment and information resources. Web sites are also constantly evolving in response to changes in organizations and technology. As a result of the above factors, the implementation process never actually ends. The amount of time and effort required for implementation does vary over time, ranging from a considerable investment for a new or substantially revised Web site to occasional minimal investment for an established Web site that is functioning well in the organization. Implementation thus becomes an integral part of regular staff planning, training, and evaluation activities.

Maximizing Staff Collaboration in Implementation

According to Holtz (1998), teams composed of members from throughout the organization are more effective in achieving Web site management goals. Such teams can benefit from the diverse strengths of each member. In such a situation, the team can effectively establish the content of the site, after which information technology professionals can offer technical solutions to problems identified. Thus, the success of an organization's Web site is largely dependent upon the involvement of individuals with different functions and from different disciplines (Marken, 1995). Having a Web site team allows for the control of a Web site to be diffused throughout the organization and limits the ability of any single person to dominate the site. Active participation of staff members in design and implementation helps staff to better understand and support the goals of the Web site, operationalizing the old adage, "people support what they help create."

Conclusion

The seven-step implementation model shown in Figure 1 and outlined in Table 1, simplifies a complex process and aids staff in anticipating important issues (e.g., ownership of site content). In short, it helps staff to proactively design a sequence of activities which can result in the successful implementation of a comprehensive Web site. By better anticipating problems and issues before they occur, less time is then needed for solving problems that could have been avoided (Sampson et al, 2001). Improved Web site implementation makes it more likely that organizations can use Web sites to meet the needs of the clients and individuals they serve.

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Table 1
A Checklist for Creating Effective Web Sites Using a Seven-Step Implementation Model

Program Evaluation

Evaluate currently available resources and services

- ☐ Review the needs of clients and individuals
- ☐ Review currently available assessment, information, and learning resources
- ☐ Review services which help clients effectively use available resources
- ☐ Identify needs of clients and individuals that are met effectively with current resources and services
- ☐ Identify limitations in current resources and services in effectively meeting client and individual needs
- ☐ Review the potential content and features of Web sites
- ☐ Identify how a Web site can enhance current successes and reduce limitations in resources/services

Prepare for implementing a Web site

- ☐ Create an implementation committee and choose a Web site coordinator
- ☐ Prepare a plan for implementing the Web site
- ☐ Identify stakeholders and administrators who can provide support for improved services

Web Site Development

Prepare for Web site development

- ☐ Review examples of Web sites having various features
- ☐ Agree on staff responsibilities and budget

Develop Web site content

- ☐ For each audience identified, describe needs and related information resources based on the program evaluation step above
- ☐ For each link clarifying user needs, create a descriptive title and learning outcome
- ☐ For each information resource, develop specific help content as needed
- ☐ Develop general help information and organizational information to be included on the site
- ☐ Edit all content for clarity and consistency

- ☐ Review all content for congruence with professional standards of practice

Design Web site features

- ☐ Agree on Web site features
- ☐ Agree on the format for presentation of text (information chunking, page length, limited memory demands, readability, accessibility and menu item ordering, etc.)
- ☐ Agree on format for presentation of graphics (effective use of icons/symbols and photographs)
- ☐ Select Web site development and delivery software
- ☐ Create page design (header, footer, fonts, colors, clarification of path chosen, style sheets, etc.)
- ☐ Create templates for clarification of audience, clarification of needs, and delivery of information
- ☐ Create pages and establish links among pages
- ☐ Create resource-based tools (Search, Site Map, and Index)

Evaluate Web site content and features

- ☐ Conduct usability testing (observation of users)
- ☐ Survey perceptions of audiences, staff, and stakeholders
- ☐ Select software for tracking of Web site usage

Complete site documentation (authorship, design strategies, and technical specifications)

Web Site Integration

Prepare for integrating the Web site with existing or new resources and services

- ☐ Review the needs of clients, staff, and your organization
- ☐ Review current resources and services provided to your clients
- ☐ Discuss theory and practice issues among staff to generate ideas about existing or new services to help clients and individuals use the Web site
- ☐ Review relevant professional standards to generate ideas about the quality of services provided to clients
- ☐ Familiarize all staff with Web site features and operation
  Decide how the Web site will be used in delivering services
- ☐ Decide how the Web site can be used with other assessment, information, and learning resources

☐ Decide how counselors, paraprofessionals, and support staff can help clients effectively use the Web site
☐ Decide how the Web site might support collaboration with other service providers

Decide how the Web site will operate

☐ Decide how the Web site will be used by clients on computers in the counseling/career center
☐ Develop procedures for scheduling client use of the Web site if appointments are used
☐ Develop a plan for evaluating Web site effectiveness
☐ Revise public relations efforts to include the Web site
☐ Communicate progress with stakeholders and administrators who can provide support

Staff Training

☐ Develop a plan for staff training
☐ Train professionals, paraprofessionals, and support staff
☐ Familiarize administrators and stakeholders with Web site design and use
☐ Evaluate training effectiveness and plan future training
☐ Continue staff training as needed

Trial Use

☐ Identify trial users
☐ Begin trial use of the system
☐ Observe and interview trial users to identify the strengths and limitations of Web site design and integration
☐ Revise staff roles and operational procedures as needed
☐ Continue staff training as needed
☐ Continue public relations efforts

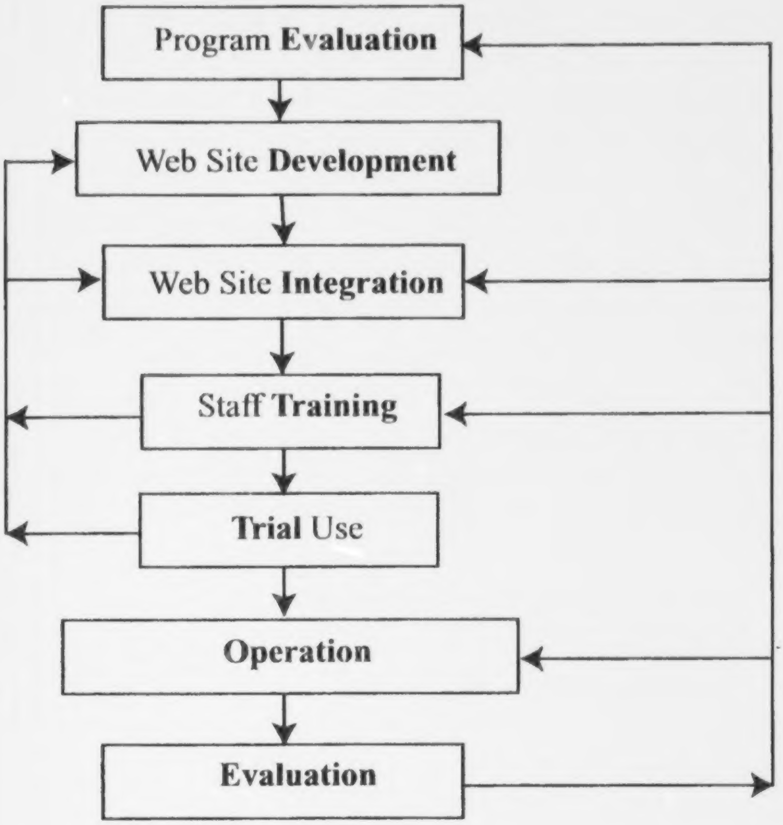
Operation

☐ Operate the Web site
☐ Collect evaluation data
☐ Continue public relations efforts

Evaluation

☐ Evaluate the design and use of the Web site in service delivery
☐ Refine Web site design and use based on evaluation results

Figure 1. The Seven Step Implementation Model


Program Evaluation
Web Site Development
Web Site Integration
Staff Training
Trial Use
Operation
Evaluation

Chapter Thirteen

On-Demand Interactive Clinical Supervision Training: Using Multimedia for Building Basic Skills in Supervision

Michael L. Baltimore and Lori Brown

Introduction

Interactive training approaches, including supplemental multimedia products, are used in industry and business, including medical training and technology, for on-demand and compulsory training. Essentially, providing adjunct and additional training on a "just-in-time" basis has become a vital part of training in a growing number of institutions. However, use by counselor educators has been slow in developing this potential area of growth. Given current technologies, uses for interactive, easily created materials can become an important addition to the training of professional counselors in classrooms, by distance learning, in web-based training and, importantly, as a stand-alone product for increasing skill (Baltimore, 2002).

In fact, interactive CD-ROM-based training, for example, can enhance class instruction associated with professional training programs and also serve as self-initiated training tools. As the availability of multimedia software and hardware has increased, creation of one or the other techniques such as video-based instruction becomes a viable option for counselor educators. In addition, supplemental content can often broaden the teaching efforts of counselor educators as students have access to instructor-driven materials as needed (Chandras, 2002; Hayes, 2001). One such area of development has been the area of clinical supervision.

A recent example is the self-directed interactive CD-ROM training program, *Clinical Supervisor Training: An Interactive Training Program for the Helping Professions* (Baltimore & Crutchfield, 2002) published by Allyn and Bacon/Longman. The training package, developed by the authors, presents a format for the use of current technologies for enhancing training and teaching efforts of educators, particularly counselor educators. The focus of the training program is clinical supervision. While this discipline lends itself to the use of computer-based interactivity, it is the premise of this chapter that many other areas of teaching and learning also can be enhanced by these methods. In fact, while this chapter will cover details of the creation and development of the CD-ROM and training manual that accompanies the program, similar processes can be adapted for almost all areas within counselor education. It is hoped that this material will provide a starting point for those educators interested in adding interactivity technologies to their teaching approach in direct or supplemental ways.

Overview — Establishing a Comprehensive Program

In the following discussion, development of this interactive learning project as well as process and content from the project will be covered. Outlines of two distinct yet harmonious areas, those of clinical supervision and CD-ROM technology, will be looked at. Further, it must be noted that exacting technology specifications is beyond the scope of this chapter. However, the creation of advanced video CD and interactivity was accomplished with ordinary and easily-accessible computer and video equipment and software. Therefore, those wishing to create similar products can find the means and begin the learning process toward merging the technology with a subject area. Our purpose will be to provide beginning information toward that goal.

Conceptualization - Content

As this project began, an outline of the subject area was developed by the authors that began from regularly scheduled training workshops given as part of an outreach approach for offsite supervisors in conjunction with responsibilities for practicum and internship students. Using much of the discussion stemming from the development of the workshops, the authors constructed an outline of introductory and advanced courses of study for graduate level clinicians. This discussion included factors necessary to build a well-rounded curriculum and fit the need of those with little or beginning supervisory background and for those more accomplished. Once this outline was created, materials used in the workshop, including video vignettes, were compiled for use in the training package. The content was outlined into chapters with varying numbers of pages depending on the depth of the material and supplemental materials for adjunct learning activities. This structure allows end users to navigate easily to topic areas and to return to points in their training where they left off. Ease of navigation is but one of many constructs to employ in creating an interactive project. Additional requirements for creating an effective training approach are needed.

Obviously, and foremost, it is important to have a thorough knowledge of any content area prior to beginning a project to train others. Several questions need to be asked: What are the necessary components to the training package? How will this content be delivered? What basic foundation must be in place before more difficult or demanding material is presented? How will the users interact with the material? How closely does this content need to match materials delivered in the classroom? What content can be added that goes beyond simple text-based material? How will the multimedia content be created and readied for CD-ROM authoring?

Secondly, the target population must be considered. Information concerning the trainees should include: background knowledge of the subject; skill level with the subject matter; interest in the subject; and the need to learn. If, for example, the target population consists of graduate students, then this assessment becomes relatively easy. However, for the general population, a more broad view must be considered given the diversity and range of skills and knowledge of potential participants.

Given this criterion, the authors may choose to limit the depth and comprehensiveness of the project to a reasonable level. That is, the depth of the subject matter usually exceeds the limitation with respect to time and, of course, technology constraints. In this project, the interactive CD-ROM for supervision was restricted to the beginning-to-intermediate level. As follow up, other interactive volumes of the subject matter may be authored for advanced and topic-specific areas. It is important to consider matching the amount of material to be covered for a complete presentation. Otherwise, any project may well suffer from attempting to be comprehensive outside the scope and limitations of the technology.

Conceptualization - Technology

In addition, knowledge of the technology necessary for CD-ROM authoring, including video-on-CD and software that allows for the design and creation of self-starting, menu-driven CDs, was essential. Basically, software for the creation (or burning) of CDs has become standard on most, if not all, computers purchased today. Along with a CD-R or CD-RW drive on one's computer, software can compile any digital file located on the computer and users can choose which files or folders to create on the CD up to the limit of the CD-ROM, usually 640– 700 MBs of storage. This factor alone will determine the content limit, especially with larger files such as video.

As one looks at content material for delivery on an interactive CD, several issues arise. First, text content and graphic content, such as pictures, slides, etc., are easily transferred and recognized from a CD on a computer system. There is little difficulty in compiling this information to disk. Other issues regarding this content pertains to design, that is, the font style, size, color, etc. with written information and graphic presentation of pictures that concerns size of the graphic on the computer screen, as well as file size. These considerations relate to format and layout much as one would design a PowerPoint presentation. The layout and design of the subject content for CD is subjective and a matter of taste to a certain point, but other considerations are just as important. For example, not all computer monitors present the same colors in the same way. A rich, dark color on one computer screen may be much too dark on one and unreadable on another. The author must be careful to consider compatibility issues in terms of design and layout of material. There are many sources to aid understanding of these issues on the web.

An important area, if not the most difficult, is the creation of video for CD. This topic is a constantly evolving area within technology and has many restrictive considerations. Many understand the difficulty in viewing video presented on the web and on CD by viewing small, pixeled and often distorted attempts at streaming video. The picture size is often small and long video clips are next to impossible to use. However, the growth in this area has been quite impressive. Given the advances in video editing equipment and software, and importantly, the video codecs (the algorthyms for compressing and decompressing video files, therefore, allowing the video to stream and maintain clarity), much of the difficulty has been addressed. These gains allow for video tape and other sources of video to be compressed to reasonable file size and displayed back to the viewer on typical computer equipment in the home. This area of the technology is also beyond the scope of this chapter. However, many websites provide futher information for those interested.

Once the materials are decided upon, the layout and presentation issues are concluded, and the video readied, the next step in the process involves using computer software that constructs the platform for delivery of the content. Several software companies offer software products that create interactivity via menu selection and the importing and placement of materials within a structure for the end result. Typically, this type of software creates "pages" or "chapters" for content and has access-controls presented to users for creating entrance and exit points. For example, in the creation of a page or chapter, the author creates "choices" for end users by ascribing commands or controls to a particular object on the page. End users can "mouse click" the object to change the parameter, such as advancing to another "page" or causing a video to play. The structure allows for expansive choice to the author, and ultimately to users, by giving control of how the content is delivered to end users.

There are many other areas that affect the creation of an interactive CD-ROM. This preliminary review will be expanded as we proceed using examples from the Clinical Supervisor Training CD.

Clinical Supervision

Establishing a Foundation

Clinical supervision is an important discipline for consumers, counselors, and counselor educators alike (Bernard & Goodyear, 1998; Borders & Leddick, 1987; and Watkins, 1997). The counseling profession has reached a point where both master's and doctoral level practitioners are beginning to identify a true need for focused training in the area of clinical supervision. With this awareness of need, there arises a void that counselor educators must step up to fill. Many master's level practitioners are asked to supervise their peers without even an introduction to what clinical supervision entails. And often, even doctoral-level practitioners haven't been adequately trained in this area. There is a good deal of power and a great responsibility involved in the process of clinical supervision and astute professionals will recognize their professional duty to become better trained in the area before offering the service.

Once the need is identified, the question becomes one of how to best meet that need. Agencies will often respond by hiring consultants to come in and provide workshops on clinical supervision, but this approach, while helpful, is often limited in scope. Indeed, there is a great advantage to providing broader resources for trainees so that they may work at their own pace, spread the learning out over a greater time span, and enhance the developmental process. Using an interactive training program, via CD-ROM technology, is an excellent means of expanding the scope of the training efforts.

The Clinical Supervisor Training program has set out to expand awareness of clinical supervision methods and techniques. It addresses the needs of training programs, clinics, and individuals by providing a comprehensive self-paced program. The content of the program addresses several important areas in clinical supervision by introducing users to concepts, definitions, and other important theories and fundamentals for providing appropriate clinical supervision. Particularly, the interactive program introduces users to the role and function of the clinical supervisor and starts with the perspective needed to create a supervisory environment. The program devotes an initial focus toward the definition of clinical supervision and the supervisor's perspective as important building blocks for training. Included in the introduction is a section dedicated to understanding the rationale for beginning training as a supervisor. This section allows users to become self-reflective, review their own supervision as a supervisee, and to define their rationale for beginning. The theme of setting goals for supervision begins with this self-reflective exercise.

Also included in this beginning introduction to clinical supervision, users will view and critique a counseling session and have the opportunity to establish a perspective as a supervisor and plan an intervention with the counselor of the session. This activity provides an entry point into the role of supervisor and supports the importance of supervisory skills and supervisor's perspective in managing the counseling efforts of those you supervise.

The Training Manual

In this product, a hardcopy training manual accompanies the Interactive CD-ROM. The design of the product utilitizes the computer and accompanying manual to ensure a greater depth of learning and gives users a supplementary learning product. An important connection is established between the CD computer training and the training document in order for users to document their progress with the program. Each chapter on the CD has a corresponding chapter in the training manual with exercises and journal activities that lead users to further develop their skills. The flow of activity between the CD and training manual was not an easy solution. It was, however, considered to be essential in adding depth of training and documentation of progress for end users.

Importantly, the reflective exercises in the training manual can be used by professors in graduate classes and constructed into group or individual activities. The program was designed for ease of use. This consideration is fundamental in having the program adopted for use in graduate training programs as well as for individual users.

In summary, an introduction into the supervision fundamentals, the interactivity and aspects of the technology, and connection with the training manual lead users to begin the developmental process of becoming a clinical supervisor through the use of this program.

Constructing the Technology

A goal of most training and teaching efforts is to integrate seamlessly the technology in such a way that the technology and learning inherent with using technology does not interfere with the learning of the content.

This goal, in terms of ease of use, must allow end users to focus their attention on the content and not on apsects of technology. Another goal of interactivity in CD-ROM and DVD creation is to quickly orient users to the product and its operation. Attention to detail in the orientation process is essential in users feeling comfortable with the product. In this supervision product, users are brought into the learning process by an audio introduction to the use of the product followed by an introductory video. This instruction module outlines how users should approach the CD and gives information necessary for optimum use. The operation of the product should be simple and navigation should allow users to move through the content easily. However, it is important to point out that not every possible instruction should be included. Once users begin the process, the product can lead to additional, yet similar content having gained familiarity with the operation and navigation. This can be called the "discovery" factor. This factor provides users with the opportunity for a sense of mastery of the content and navigation of the product.

Importantly, several issues become apparent. The attention span of users to material such as lengthy text-based articles displayed on a computer screen is a consideration. Typically this span is short. Another issue is the "readability" factor. Reading long series of printed material on the computer screen is not acceptable to most. In fact, many prefer short, precise content in easily read font size. These are considerations for moving any users through content and must be balanced between providing indepth content and acceptable levels of the readability. Included in this is the editing process that breaks material into appropriate modules or subchapters. In this way, the author can include additional and necessary materials without placing an entire section in a small space.

Another goal of the introduction is to have the reader understand the "best" approach to interactive learning. Many have never used this modality before. Therefore, it is important to have instructions (video, audio, or in text) that encourage users to make use of a sequential and, in terms of this CD product, developmental approach to learning. In this case, users are instructed to read each chapter page, follow instructions given (for example, view the video clip, etc.), reflect on the material, answer questions, view the activities in the accompanying training manual, and journal their response in the manual. This thorough approach gives users ample time to reflect and respond to material that often is new and needs more than a quick read.

Finally, specific instructions to the product's interface might be necessary. For example, instructions in a popup text box and buttons on the page may need to be prominent. Many Windows-based operating systems will allow for "hover" or "tool tips" boxes to be displayed when the mouse cursor stays over the object for a short time. These additional instruction sets will help users to navigate and maneuver confidently through the product.

Establishing Further Learning Objectives

In the middle section of the CD-ROM training program, trainees are introduced to further foundational information for becoming a clinical supervisor. It is important to consider that supervision theories have, for the most part, been ignored in many approaches to supervision training. It is believed that the theoretical foundations of clinical supervision, and those specifically focused on supervision and not counseling theory, are extremely important for training new supervisors. These models are presented for users to acquaint themselves with paradigms that are exclusive to counseling theory. Counseling theories adapted to clinical supervision are also covered. Users are exposed to this content with slide presentations with voice and audio files. These files are offered without audio on the CD in a resource folder for faculty who wish to use the slides in classroom presentations.

This section suggests that trainees begin the process of establishing a theoretical orientation to their clinical supervision work. Further reading is recommended to trainees. The models of supervision can be reviewed as often as necessary and the training manual provides exercises for strengthening this knowledge base.

Additionally, this section of the CD provides one of the most important areas in the training package. An initial supervision session is presented in its entirety and is broken into segments allowing users to fully understand the components of the session. This presentation is vital in developing a sound beginning to supervision. The segment provides users a video and text with extensive interactivity for the trainee from the training manual. Issues of confidentiality, record keeping, structure of the supervision sessions to come, theoretical orientation of the supervisor, emergency contact, evaluation, and establishing rapport are but a few of the important areas covered in this presentation. Additionally, this segment offers a process session where the supervisee presents a case in progress and the supervisor demonstrates the supervisory role and management of case presentation material.

Other supporting material is presented on the CD for issues of "Process and Practice". This section is presented as text and audio lecture and addresses such areas as practicum and internship supervision, managing difficult situations, and style differences, to name a few. The focus of the

CD training program is largely a balance between presenting content relevant to clinical supervision and practical, process-oriented activities for learning.

Linking Interactivity

In translating the learning objectives to interactive components of the CD, the authors created differing approaches depending on the audio or visual need inherent to the material. In other words, some materials lend themselves to simple text that must be read (e.g., definitions, etc.). The materials concerning the models of supervision were thought to be better delivered through the use of slideshow presentation but needed further elaboration for complete understanding. It was decided that accompanying audio lecture material for each slide would greatly enhance the meaning for each slide and its information.

At the outset, it was clear that a presentation of actual and roleplay sessions of supervision should be included in this interactive CD. One of the first, coming from experience in the actual workshop, was to present a supervision session and ask users to describe their impression and make decisions about how they might manage the supervisee from their role as a clinical supervisor. This introduction, without the necessary instruction coming early in the training, provides the background for bringing users to a beginning stage in the training progression. This interactivity with the supervision session places the supervision trainee into the role and therefore facilitates a more experiential reaction. It further resolves the authors' desire to present an important concept in supervision, that of the supervisor's perspective. It also allows for further exploration into the differences between supervisor and counselor.

One of the most important and essential components of this CD training program was to demonstrate an initial session of supervision and its components. This hour-long introductory supervision session was divided into segments to allow for appropriate learning to take place and each of the components to be explained thoroughly. The technology involved digitizing the video from the camcorders into computer files. These files were AVI (Windows' Audio-Video Interface) files that are the standard (along with QuickTime by Apple Computers) formats for video on computers. Necessary equipment includes a video capture card with connectors that allow for the flow of large files and a comparable hard disk. Video capture cards are readily available and typically come with capture and editing software. A standard video editing software package, like Adobe's Premiere, while presenting a steep learning curve, can provide users with a comprehensive program for control over video output. Also, this package includes compression schemes that allow for reducing the large files to a significantly lower file size and frame rate (frame rate is associated with the computer's ability to present video in viewable way). Once files are processed through a video editing program and readied for computer viewing, the next step is to build a background for display. The program, in this case Indigo Rose's Autoplay Menu Studio, used to build menus and chapters in the final presentation on CD, will import video and permit the author to locate and add controls to the project.

Finally, authors should be aware that navigation should move smoothly from one subject area to the next. Grouping of subject material in a coherent way that logically builds from foundational information is extremely useful in reaching this goal.

Important Concepts

A vital addition to any training in clinical supervision is that of ethics. Supervision ethics cannot be over looked in the training of any clinical supervisor. The Association for Counselor Education and Supervision (ACES) has prepared ethical standards for supervisors and standards of practice information that are important documents for the profession. The Clinical Supervisor Training Program presents these guidelines with the program. However, for purposes of training the CD-ROM adds additional interactivity to enhance the learning process. On the CD, users are presented with a number of ethical dilemmas that allow them to become familiar with the ethical standards and apply these standards to a video presentation by a supervisee. In turn, the trainee must define the dilemma, find the appropriate code in the standards, and decide a course of action as a supervisor. This interactivity is an engaging activity that goes beyond reading and memorizing ethics standards. Preparing a supervisory response is the important outcome of this exercise.

Multicultural supervision awareness is a significant aspect of any training program. Here, users are introduced to basic information regarding cultural appreciation and awareness. A video clip from an actual supervision session is presented for review. Additional practice in becoming culturally aware is contained in the training manual and in the interactive scenarios found later on the CD.

Group supervision was not the focus of this CD-ROM training program. However, an example of group supervision was used to introduce trainees to aspects of group supervision. Group process and group leadership is discussed briefly in the text presented in this chapter.

Finally, in this section, issues of evaluation and termination were presented. The authors were aware of the importance of evaluation procedures and due process issues that related to assessment of a supervisee. These issues were presented in several ways, including handouts and exercises in the training manual. Additional issues were addressed in the Issues chapter and in the Ethics chapter. Once completed, trainees are brought to the end of the 16-chapter program and prepared to move to the supplemental materials including the video scenarios and resources content.

Linking Interactivity

In the ethics section of the current project, the authors envisioned a highly interactive section of the CD that focused on learning ethical standards, and more importantly, provided users with an application of the material. For this exercises using video vignettes were constructed and filmed leaving users to complete the following: a definition of the ethical dilemma, the matching code from the ethical standards, and an appropriate response from the position of supervisor. The videos were compressed in an AVI format for playing on all Windows-based operating systems. Each scene automatically moves to the ethical standards page where users can scroll to find the appropriate code. The training manual assists users in preparing a supervisory response.

This section challenges users to prepare a response by first consulting with the standards and becoming familiar with the code such that a response complements a customary and reasoned approach. Usually when you say "by first" there is a "secondly" or a "and then." As this is a single sentence paragraph, I wonder if you really need.

Multicultural factors in supervision are enormous challenges for counselors as well as supervisors. In preparing this section, only a sampling of the overall issues related to supervision around multicultural issues was attempted. A brief video clip from an actual supervision session discusses the supervisee's response to the client's cultural issue affecting the marital relationship. Much more is possible in this section, yet it is the author's choice to highlight this area. In another section, the supervisee scenarios, the trainee will have additional opportunities for practice with cultural issues as well.

The group supervision chapter consists of an embedded video clip with accompanying information in the chapter. Further, the trainee is pointed to the training manual exercises for exploration into group supervision. Help!!! On the previous page you said, "Group supervision was not the focus of this CD-ROM...."

Other technical concerns brought into the final phase of the main training module were the addition of text forms and examples used in clinical supervision. These model forms were addressed as popup text boxes triggered by clicking on buttons embedded on the page. On the CD, additional resources were included in an appendix section, which users can refer to and download and print. These resources offer content that can be used in clinical supervision and is offered in addition to the regular program training. These files were saved in "rtf" format (text recognized by most word processors) and in slide presentations that can be used by faculty in teaching supervision courses.

Additional Interactive Training — Augmenting the Content

An exciting section of this CD-ROM video training program was the addition of supervisee scenarios. This section presents four supervisees presenting typical issues for discussion and response from a supervisor. The trainee is placed in the role of the supervisor and makes choices regarding responses to the supervisee's statement and questions. The trainee is guided through these scenarios, each with a different dilemma. The training manual also assists the trainee and provides ample opportunity to prepare a response. The intent of these scenarios is to give the trainee actual supervision issues to face and resolve. Being placed in this role provides a unique opportunity. The trainee may choose different responses the second or third time they navigate the scenarios.

Finally, the learning of skills as a clinical supervisor has to be developed as one is faced with a supervisee and her or his presenting issues. This interactive training approach was reviewed by other professionals and found to be helpful in creating an environment where the application of learning assists in the development of their role as supervisor. The trainee may wish to visit this section as often as needed to continue to learn and experiment.

Technology Issues

Interestingly, the interactive supervisee scenarios that have become a very important part of this project were created in the last phase of the work. A decision tree was formulated giving the trainee an opportunity to interact with supervisees who present dilemmas and questions for the supervisor. Once the trainee makes a choice, the follow up response by the supervisee has to match the first response. A continuation of the initial issue leads the trainee to a supervisory position. Obviously, there were countless choices that could be entered. These scenarios were scripted to the extent that a series of logical conclusions could be reached depending on the actual choice of the users.

The attempt by the authors to create actual supervision session issues was based on personal experiences in clinical supervision. Technically, training the supervisee actors was important and filming close video shots that allowed users to experience being in the role of a supervisor face-to-face with the supervisee was essential. In addition, placing the choices within the creation program was an aspect of this project that took considerable time so that once the users made a choice, the next video clip would begin or allow for a second choice. This presented some difficulty as each response had to move users to a different segment of the CD. Once completed, users then can choose another scenario or navigate to a different part of the CD. The compression of the videos in this section added a significant amount of file size to the overall size of the CD, but within the 650-megabyte limit. Routing users through this matrix of choice was resolved by drawing out the choices in a chart. Using this technique was much like using a storyboard in film.

Finally, this section was added after the main sections were constructed. Authors may wish to construct this type of interactivity after considerable thought. Thinking through what possible choices should be included and creating appropriate responses, given the vast array of possibilities, is crucial.

Conclusion

Clinical Supervision

Clinical supervision is a discipline that is essential to clients who receive counseling, counselors for their development, and society which benefits from the helping professions. The training and development of qualified clinical supervisors continues to be important across the disciplines and academic training programs. The development of an interactive training approach on computer CD-ROM opens opportunities for those in training programs and those who have little access to supervision training. The publication of this training package is focused on advancing clinical supervision. A concise yet comprehensive and highly interactive product was our objective. Ease of use and accessibility was also essential. The authors hope to see continued development in the area of clinical supervision for all practicing in the helping field. This product is just one step toward that goal.

Technology

Constructing the content and learning the technology was a significant task for the authors of the Clinical Supervisor Training Program. Many of the aspects of the CD-ROM training program were not covered in this chapter. The technology allows for multiple ways of presenting data and multimedia technology has advanced rapidly. So rapidly in fact, that newer versions of this same software are about to be announced. There was extensive testing and retesting on this project before it reached its final form. Many people were involved in the making of this program and the authors are certainly grateful for the help and assistance.

The authors have attempted to focus on solid supervision training content and on the interactivity necessary for learning. A large focus was on the application of the content. Additional materials, such as a website that supports this training package, is in place. Users can augment their training as necessary with resources and handouts from the training program. It is believed that those interested in clinical supervision will benefit from this training. Finally, it is also hoped that other authors will decide their material can be presented in an interactive format and pursue the learning necessary to build an interactive program for their own purposes.

This project relied on a knowledge of software that creates interactivity between the user's choice and presented material on the computer screen. A knowledge of video production and editing was necessary. Authors wishing to create interactive CD-ROM products should consider their background and knowledge of computer operating systems, hardware configurations, and the latest versions of presentation software. Using the most up-to-date software and hardware is essential for a workable and reliable product. There are many commerical versions of presentation and interactive software available. Yet, there are just as many compatibility and platform issues to overcome. Technology advances at a very rapid rate. Decisions of how to incorporate the technology can be overcome and more effective means of content delivery via these newer technologies will enhance counselor education and training.

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Chapter Fourteen

Development of a CD-ROM for Computer-Aided Instruction and Research

Paul F. Granello and Joe E. Wheaton

Limited literature concerning computer technology exists in the field of counselor education despite the increasing use of technology as a method of instructional delivery. The use of computers to aide or mediate instruction is rapidly becoming commonplace in many counselor education programs, yet little is known about the pedagogical advantages of such instructional methods for student learning. However, the on-line Journal of Technology in Counseling (JTC*)* (http://jtc.colstate.edu/) has published articles relevant to the use of Computer Aided Instruction (CAI) as a pedagogical approach in counselor education. For example, Hayes (1999) gives an overview of the history of computer aided instruction as related to counselor education and also calls for more research into the usefulness of multimedia instruction on student learning. Further, Baggerly (2002) directly addresses the issue of CAI and counselor education pedagogical principles indicating that, "A variety of technological applications can promote pedagogical principles of active learning in counselor education as long as form, i.e., technology, follows function, i.e., pedagogical principles of active learning." Casey (1999) also writes about the importance of "active" and "interactive" learning as pedagogy relevant to counselor education and illustrates the utility of CAI by giving examples of computer simulations for counseling students.

While an extensive review of CAI is not the focus of this chapter, readers wishing to gain a further historical context for the use of computer aided instruction in counselor education may want to read the first chapter of the original *Cybercounseling and Cyberlearning* (Bloom & Waltz, 2000). The section devoted to the historical relationship between counseling and Computer Aided Instruction (CAI) and the section relating to counselor education and supervision applications (Granello, 2000) will provide useful background. Readers are also encouraged to look at the 1984 special technology edition of the journal *Counselor Education and Supervision*. Also, due to the current state of the literature within counseling, counselor educators wishing to learn more about CAI will have to look outside of our field. The general education and business education literatures are good places to find more information about CAI in publications such as the *Journal of Computer-Based Instruction.*

The primary focus of this chapter will be to relate thoughts about CAI as a pedagogical approach for instruction and also to illustrate the process by which the authors have developed one type of CAI project. The project consisted of a CD-ROM for teaching counseling theories that lends itself to both instructional and research purposes.

Technology as an Instructional Delivery System

Although the word "technology" is often used as a noun as though it were a "thing," technology is actually defined as "a method or process for handling a specific problem." Technology is not a tangible object but rather the process for solving a problem. In counselor education one of the primary directives is to solve the problem, "What is the best way to deliver instruction to students so that they may learn to be effective counselors?" Counselor educators have been using various methods and processes (technologies) for instruction throughout the history of counselor education. The ditto (photocopy), the chalkboard, the overhead projector, films, and audio and videotape are all instructional or information delivery systems that have been used in the past.

Today counselor educators have been given a new method for instructional and information delivery, namely the computer (and, perhaps more importantly to us, the software that runs on it). What makes the computer interesting is that it seems to offer unique features that the older information delivery systems did not offer. For example, computers are multimedia. They offer a wide array of audio, graphic, and text based information. Further, computers also allow media to be customized, disseminated, and interacted with in ways that other older information systems did not. Another important feature is that the computer is one of those rare tools that can be used to make other tools. Users can create materials on the computer such as web pages, programs, and text documents that can be shared and used by others. In a sense then the computer can both integrate information and disseminate that information in new ways that did not exist before.

Complicating things further, people have used the capacity of the computer to create its own applications to produce an ever-greater list of CAI information delivery modalities such as CD-ROMs, DVDs, specialized program applications, authoring applications, Web browsers, and streaming media players. Commercial venders like WebCT and Blackboard provide software complete with a new array of methods for instruction such as chat rooms and threaded discussions.

Pedagogical Rationale for Computer Aided Instruction

Given that the growth of new instructional technologies has thus far significantly out-paced the ability of educators to research and evaluate their merits, the first question counselor educators should ask themselves is, "Do I have a pedagogical reason for wanting to use technology in my instruction?" This is a more complex question than it sounds. First, some faculty are pressured to "get with it" and to use technology for the sake of technology, not necessarily for the benefits it may bring to instruction. Faculty may dive headlong into using technology to please their department chairperson or dean who may think that technology (distance education in particular) is a panacea for their budget woes. Second and perhaps more importantly is the question, "Will my use of a specific technology enhance the students' learning?" There is a paucity of research on the actual pedagogy of counselor education and even less on the use of computer aided instruction.

Counselor educators should not confuse the development of standards for implementation of technology, such as the current Association for Counselor Education and Supervision standards (ACES, 1999a, 1999b), as empirical evidence that new technologies actually deliver the end goal, which is enhanced student performance. The ability to deliver information via a specific computer application, just because it is possible to do so, does not mean that it naturally follows such a delivery method is most desirable for student learning. For example, the use of PowerPoint to deliver lectures is now a common practice. However, frequently the materials that are projected using a computer are not any different than how text could have been presented using transparencies and overheads. In this case it can be argued that the use of technology does not really impact the students learning (unless features of PowerPoint are used that can not be duplicated via transparencies such as animations, video, or links to the Internet), but rather may only serve a purpose for the instructor, or worst of all may only be for the sake of using the equipment because it is available.

After pointing out the above caveats, why use CAI for delivering instructional materials to students? In response to the caveats, several reasons seem to make sense. First, it is only through interacting with computers and CAI can we improve our understanding of the computer as an instructional delivery system. Second, through such interaction we can develop our skills as educators in using the tool of CAI. Lastly, we need to create more digital resources that can be used to further investigate the effects on student learning. What follows in this chapter is the process that was used to develop a CD-ROM for helping a student learn counseling theories. We undertook this process to learn more about the potential of computers as aides to learning, to improve our own skills with technology, and to create a learning resource for our students that could also be used to study the effect of CAI on their learning. Although the process of creating a CD-ROM is bound to be idiosyncratic to some extent, due to personal and environmental circumstances, it is hoped that providing some outline here will assist those endeavoring to explore CAI to think of some things they may not have, or even better, avoid some of the pitfalls associated with such a project.

Why a CD-ROM was a Good CAI Technology for this Project

Providing counselor education students with an opportunity to see videotapes of counselors who had different theoretical perspectives working with actual clients would be useful pedagogically because students would be exposed to appropriate modeling. Also we wanted students to interact with the material at their own pace outside formal class time, thus making learning more active and demonstrating a pedagogy that acknowledged students with differing learning styles.

It quickly became apparent such a project would be video intensive. We wanted to show at least two different clients being counseled and we wanted to show several different theoretical approaches. Four theories were decided upon: Rational Emotive, Gestalt, Brief Solution Focused, and Existential. These were chosen because they represented both diversity of theoretical approach and current widespread use in practice. Video taping two clients in four different counseling sessions, each showcasing a different theory, already meant creating eight videos. Remembering the good old 'Gloria' films, we decided it best to have the counselors comment on each session, so we added another eight videos to the project. In all, sixteen videos were created.

The high video demand of this CAI project led us to using compact disk technology as our instructional delivery system. While the content could have been delivered using an alternate technology such as streaming media player embedded on a web page, the amount of video associated with the project seemed to preclude this as a viable possibility for students. Most of our students were accessing the Internet using conventional phone lines through their university student accounts which unfortunately does not transmit information fast enough to make streaming media practical for viewing large video files. All our students did have access to CD-ROM players in their computers or in labs that could play the video files. Further, CD's were portable, a familiar format to the students, and could store all of the information students needed to have for the CAI exercise. CDs were then chosen as the delivery technology for this CAI project because they eliminated many problems associated with delivering information via the Internet, such as software compatibility, server space, and bandwidth.

Planning and Producing Content

For the CD-ROM project at least five steps seemed warranted for developing content.

- *Creating a Project Proposal*
  As previously stated, we proposed the creation of sixteen videos plus the development of other content materials. Also mentioned were a proposed time line and an initial listing of necessary hardware and software. Finally the proposal listed project personnel, an estimate of their time, and an estimated budget.
- *Writing Support Text Files*
  In addition to video files we created support text files for the CD-ROM. The purpose of text files was to give students background or context in which to view each demonstration video. The text support files were kept brief because it is not efficient to have students read long text passages from a computer monitor. We created two types of files: one was a brief summary of each theoretical orientation consisting of key concepts and techniques associated with each theory, and the second was background information on each client's case. Students read these files before watching the video demonstration to contextualize the video material, both in terms of the client's specific case and the counselor's theoretical approach. Reading these files allowed students to know what to watch for and assisted in identifying specific techniques when viewing a counselor working from a particular orientation. Text files were created using Microsoft Word/Æ and saved as hypertext markup language (HTML) files.
- *Finding Participants and Taping the Demonstration Video Files*
  Creating demonstration videos for each theory was more complicated than producing the supportive text files. Indeed,

making and editing the video was the most complicated step. First, we had to recruit two clients and a counselor who would demonstrate each of the four theoretical orientations. Each of the eight clients was paid a small stipend to participate. The clients were volunteers and the counselors were professionals from the Columbus, OH community known to practice in accordance with the theory they were asked to demonstrate. All counselors had university training in their particular theory and had attended professional education programs such as Gestalt or RET Institutes. The counselors were also provided with a text file of "key concepts" written about each of the four theories. Finally, counselors were instructed to not worry about providing a "perfect" example of their theory, but rather a realistic session of what their regular work with clients might look like. We did not want to script the counseling sessions or show "perfect" work samples that might seem unrealistically attainable for students, but rather real counseling session examples with both good and weak points.

Technically in filming the video demonstrations, we wanted to have several camera angles to add some variety to the videos. We employed three digital video cameras which taped in "digital eight" format. We set the cameras up on tripods in fixed locations, with one focused on the client, one focused on the counselor, and one focused on both. These cameras all taped the sessions simultaneously. We originally thought that we would use a special "conference table" type microphone, but actually found the microphones on the cameras to be just as good or better. We also suggest having each participant use a clip-on microphone to further improve audio quality.

Four theoretical approaches, not including counselor comments, with two clients from three angles yielded twenty-four digital tapes. The counselor comment videos were made by allowing each of the counselors to view the session we had just taped. Each counselor was instructed to stop the tape periodically and make a comment about his or her work with the client. These comments were filmed using one camera focused on the counselor.

- *Editing the Demonstration Videos*

After getting the content onto digital videotapes, the next step was to transfer the digital eight taped material onto a computer hard drive so we could have video computer files with which to work. The video cameras were plugged into a university lab Apple G4 computer with a "Firewire" connection. Firewire is a fast connection type method for moving large amounts of digital material and it worked rather well for our needs. We used the Apple "iMovie" program to download the video material from the cameras and to save material as "Quick-time" format video files. Further, we did not want to leave video files on the lab computer so we purchased a large external hard-drive (get the largest you can afford – ours was 80 gigabytes). All of the digital video files were then compressed and moved onto the external hard drive (again using firewire) making our material easily moveable from computer to computer. Once we had all the video material moved onto hard drive, the next step was to edit the three different angle videos for each demonstration session into one seamless video. Surprisingly, the editing of the video files, while very time consuming (allow one hour of editing time for each two or three minutes of end product video), was a lot more fun than expected. We used a program called "Final Cut Pro 3" to edit our files. We found that this was a very powerful program with many features that was relatively user friendly. There are many programs available that will allow you to edit digital video so find one that works best for you (see software tip below). Most of these editing programs work on a timeline principle, as did ours, that will allow you to "drag" and "drop" your video clips (extracted from your video files) into place. It is important to make sure that audio quality remains high, such that you do not omit any audio or overlap audio tracks when editing. Finally, after we edited our three video files into one final demonstration video, we recompressed the files and stored them on our external hard drive.

- *Creating an Interface*

The last step of in the process of making the CAI project is to create an environment or interface in which you can structure how your students can access and work with the text, video, or any other types of files you have made (audio, image, etc.). This interface should be simple and straight forward. Today, many students are familiar with using Web browsers and using hyper-links to "move" or access information on a particular subject. We decided to make our interface as simple as possible and to make it like a Web page which we thought would be familiar to our students and which they could view using a standard Web browser such as Microsoft Internet Explorer® or Netscape Navigator®.

The interface design should be "clean," without excessive text or irrelevant graphics that may distract or confuse your student learner. The interface is simply the template through which you want to deliver your material; it should not become a hindrance by being overly complicated to learn or intruding upon (via color, sound, or speed of presentation) the students' ability to focus on the instructional material. The interface should consist of a main page, which provides directions for navigation, and also a help text file. It is probably best to avoid complex navigation schemes and use of multiple layers of web pages.

There are many programs available for designing web pages (Microsoft Front-Page®, Netscape Composer®, Macromedia Dreamweaver®, Macromedia Flash®. Further, many of these programs now allow the user to work graphically and not have to know how to write complicated HTML. Although all of these programs have been designed to assist in developing Web pages, each has slightly different features and compatibility with different types of files. You will need to choose the program that will support the types of files and content that you want to deliver to your students.

We chose to work with Microsoft FrontPage® for our CAI project. The primary reason was our own skill level in working with this program, which we had used to create Web pages for Web sites. Also, this program was feature rich and used a similar menu of tools to those used in most Microsoft Office® applications. Design of Web pages is relatively simple using this program, which allows for graphical design that allows the user to make a Web page without knowing how to program in HTML. The final stage of the project is copying all of your files to the CD-ROM. You will need a CD-RW (read-write) drive in order to do this.

Tips and Reflections

- No software program is ideal.

Unfortunately, there is no one perfect software program that can perform all of the "chores" for putting your CAI project together. You will need to become familiar with several programs. We found that some of the more sophisticated software programs, such as Adobe PremierÆ, while feature rich, were also difficult to learn how to use. It is important to find programs that can perform the functions you require but do not ask you to invest hours learning how to use them.

- Most things are not "plug and play."
  Computers, no matter what platform used, can be vexing. Compatibility is a significant issue to consider when selecting hardware and software. This may sound silly, but make sure any external hardware (CD-RW or Hard Disk drives) will plug in to the ports you have available on your computers. Check, before you buy, that the software will work with the file types and extensions that you will be using for your project. For example, Microsoft FrontPageÆ does not work easily with Apple QuickTimeÆ files. Visit the hardware or software makers' web sites to find out about compatibility issues.

- Video files are very large.
  Video files get large quickly. This means that that you need storage space for them. Purchasing a large external hard drive is really helpful; you can keep all your files in one place, not fill up your computer, and the drive can be moved and plugged into different computers. Also, no matter how fast your computer, because these files are large, it takes time to download, edit, and save them. Allow appropriate blocks of time for your work sessions to avoid frustration.

- It costs money to make a CD-ROM.
  No matter what anyone tells you, it is not cheap to make a CD-ROM. You will need to have the right hardware, such as fast computers, external hard drives, digital video cameras, microphones, and CD-RW drives. You will also need software for editing video, creating text or other image content, and for designing your interface. Finally, your time, and the time of anyone else who assists, is worth money. So, know that equipment, software, and personnel are all budget considerations when considering a CAI project, like making a CD-ROM.

- A CAI Project is a Black Hole of Time. Beware! You can spend as much time as you have on a project like this. If you are like us and like to work with computers, you can find lots of reasons to work on a project like this instead of doing other more mundane faculty chores, like attending committee meetings. Taking on a project of this type requires a considerable time commitment and you will need to weigh the benefits against the costs to you personally.

- Balance Quality with Practicality
  It is important to remember that the purpose of your CAI project is to make a useable learning resource for your students. When making video, you will not suddenly become imbued with the skills of Francis Ford Coppola, so sometimes an editing or lighting glitch is going to be OK. The question to ask your self is, "Will this technical problem adversely affect my students' ability to use and learn from this project?" If the answer is yes, then you can address the issue; if the answer is no, then let it be. If we as counselor educators want to get into the business of using video and computer technology as an instructional delivery system, we need to improve our skills in these areas and also realize that the quality of materials we produce ourselves will not be up to commercial standards.

- Collaboration is a necessary key for success.
  There is a lot of time and work in developing a good CAI project, so find others who are also interested in developing projects and spread the work around - sometimes many hands do make light work. Also, you may not need to become an expert in every part of the project - perhaps you can be the video person, the content producer, or interface designer. If you don't have to be in control of every facet of a project you also don't have to play all the roles. Take advantage of others' talents; as a counselor, bring your talents to bear at facilitating groups.

Using the CD-ROM for Pedagogical Research

One of the prime reasons for wanting to make a CD-ROM about counseling theories was to develop an instructional exercise for use by students that would lend itself to research. Specifically, by designing a CAI exercise for students, we could then study the effects of CAI on the students' learning. One research method would simply be to provide the CD-ROM to one group of students taking a theory course (treatment group) and have students in another theory course proceed without the CD-ROM (control group). Measurable outcomes could be scores on tests or quizzes concerning each theory, or observer ratings based on students' abilities to role-play appropriately with a standard client each of the theoretical orientations.

Conclusion

Counselor educators should not use a new technology for its own sake, but rather because it enhances our ability to instruct and our students ability to learn. Given the lack of research demonstrating the effectiveness of the use of CAI in counselor education, current applications of this technology should be considered experimental. Currently, faculty wishing to experiment with CAI may have to produce their own instructional materials, and choose a technology (CD-ROM, Internet streaming media) that they believe will enhance the efficacy of their students' learning. Contributions to the counselor research literature on the effects of CAI for counselor education students are sorely needed and it is hoped that the reader will consider using materials they may develop as a basis for research study and publication.

Computer technologies for aiding instruction are of course moving faster than our ability to make sense of them, or to fully grasp their implications for student learning. We just have a sense that they are mighty and that we must wrestle with our lack of understanding, so that we may harness their power for good purposes. So, it is not a matter of the technologically literate vs. the non-literate. All counselor educators are, of course, still trying to figure out just how to make the most of this new tool for information delivery and also to begin to study its impacts on student learning.

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Chapter Fifteen

Using Web-Based Surveys to Conduct Counseling Research

Darcy Haag Granello and Joe E. Wheaton

Internet use in the United States is growing by more than two million new users per month and more than 150 million Americans have regular access to the Internet (Cyber-Atlas, 2002). Americans are becoming increasingly computer literate and the Internet is becoming the communication and information method of choice for many people (Duffy, 2000). Because of the expansive growth of the online population, researchers from many disciplines are starting to see the benefits of collecting data over the Internet (Schleyer & Forrest, 2000). Consequently there has been a rapid proliferation of online data collection as well as research published from online data sources (Crawford, Couper, & Lamias, 2001).

In spite of this increased use of the Internet for data collection, there is little published research about the process of data collection online. That is, discipline specific studies publish the *results* of their web-based surveys in discipline-specific journals but little information is available on the *process* of Internet-based data collection. Thus it is difficult for the researcher wishing to use this cyber data collection method to find resources to use as guides.

Collecting Data over the Web

The two most common types of Internet-based data collection are e-mail surveys and web-based surveys. With e-mail surveys, the participant receives an e-mail with a survey embedded in it. To complete the survey, the participant "replies" to the message and fills in the information just as is done with a paper and pencil survey. The survey is then e-mailed to the researcher who transfers the raw data into a database. The advantage of the e-mail survey is minimal technology or computer literacy is required by the user. However, a major disadvantage is the loss of anonymity as the user's e-mail address is transmitted with the answers.

The use of a web-based survey, on the other hand, requires the ability to use a web browser but allows for flexibility and design control, automatic data entry, and anonymity (Harris & Dersch, 1997). With web-based surveys participants are solicited to participate in the survey either by traditional mail, e-mail, telephone, or through other websites. Participants are given access information to enter the survey website; they complete the form online and then click on a "submit" button when they have completed their response.

Web-based surveys are quickly becoming the online data collection method of choice by researchers. This chapter outlines the advantages and limitations of web-based data collection and then describes the design and implementation of a web-based survey that has been conducted by the authors. Practical suggestions and lessons learned are included for researchers wishing to engage in their own online data collection.

Advantages of Web-based Surveys

Web-based surveys have several important advantages over paper and pencil surveys that make them particularly attractive to researchers. These advantages include reduced time, lowered cost, ease of data entry, flexibility and control over format, software development, recipient acceptance of the format, and the ability to obtain additional response-set information.

Reduced time. A primary advantage of web-based surveys is that they dramatically decrease response times (Lazar & Preece, 1999). Farmer (1998) reported that typical turnaround time is four to six weeks with traditional mail surveys, two to three weeks for telephone surveys, and only two to three days for web-based surveys. Franceschini (2000) also noted reduced turnaround time. In his study, half of the respondents were sent mail surveys and the other half were surveyed via the Internet. He reported that 21 of the 29 web-based responses were received before there were any responses to the traditional mail survey. In fact, Bauman, Airey, and Atak (1998) found that the majority of recipients of an e-mail survey either responded within one to two days of receiving the initial solicitation or not at all.

Lowered cost. Web-based surveys can have substantially lower costs than traditional mail surveys because there are no printing, postage, or stationary costs (Bauman, Airey, & Atak 1998). There are, however, some costs associated with web-based surveys, primarily for programming, using space on a server and some limited data entry. Farmer (1998) argued web-based surveys are 50% less expensive to implement than telephone surveys and 20% less expensive than mail surveys. In their study, Schleyer and Forrest (2000) found the web-based survey to be 38% less expensive than mail surveys. If there are technical problems with the survey, however, costs associated with "help desk" technicians can increase costs dramatically (Couper, Blair, & Triplett, 1998). To address the need for help desk support, an initial piloting of the survey is essential to reduce the number of unforeseen technical problems that can increase cost.

Ease of data entry. In traditional paper and pencil surveys or even with e-mail surveys, data entry can be extremely expensive, time consuming, and subject to error. An electronic survey can be configured to send data to a database, spreadsheet, or a text file for use with a statistical package, eliminating the need for data entry with all its attendant problems.

Flexibility and control over format. Using the web allows researchers to use flexible design formats such as color, graphics, innovative question displays, split screens, embedded programs (applets), animation and sound (Dillman, Tortora & Bowker, 1999). Additionally, researchers can control the order in which respondents answer the questions easier than with paper and pencil surveys where respondents can flip back and forth and change answers (Wyatt, 2000). Other rules, such as "select one answer only" or "do not leave this question blank," can be enforced with radio buttons (Lazar & Preece, 1999). With web-based surveys, the order and formatting of questions can be easily altered, which is particularly useful for Delphi studies (Wyatt, 2000). One study found that dropout rates were significantly lower when the order of data collection was changed and demographic information was collected at the beginning of the survey (drop-out rate 10.3%) rather than at the end (drop-out rate 17.5%) (Bosnjak & Tuten, 2001). Although this flexibility can be extremely useful, there are no definitive answers as to the psychometric effects of the various web-based formatting options (Arnau, Thompson & Cook, 2001).

Software development. Most Internet surveys are now constructed using HTML format with the potential respondent contacted via an e-mail cover letter. HTML editors are becoming increasingly more sophisticated and easy to use and data can be captured by a program on the server called a Common Gateway Interface (CGI) script. Several products exist that provide both the editing capacity for HTML and the necessary CGI scripts for capturing data. The most common of these are Microsoft's FrontPage and Macromedia's ColdFusion (Solomon, 2001). Additionally, there are some software programs designed specifically for web-based surveying that offer additional features such as management of the distribution of e-mail cover letters, built-in statistical analysis, the ability to generate reports, and automatic tracking of respondents. Examples of these programs include Zoomerang, Perseus's Survey Solutions for the Web, Creative Research System's The Survey System, and Survey Said™ Survey Software (Solomon).

Recipient acceptance of the format. There is some evidence that the Internet is becoming more acceptable to respondents as a method of collecting data, particularly for males (Dillman et al., 2001) and for individuals who are college-educated (Cartwright, Thompson, Poole, & Kester, 1999; Franceschini, 2000). Several authors have noted that self-disclosure is increased when people communicate via the Internet (e.g., Joinson, 1999; Joinson, 2001; Moon, 2000). Conboy, Domar, and O'Connell (2001) found that an Internet survey offered the necessary assurances of anonymity to allow respondents to give accurate data surrounding very sensitive health issues. Participants appear to accept claims of confidentiality and anonymity, even though there is a possibility that Internet password and encryption codes could be broken (Harris & Dersch, 1997) and Internet Protocol (IP) addresses can be identified. In fact, IP addresses that can identify a specific computer are easily obtained (it is merely a check box in Microsoft's FrontPage). However, identifying who actually used the computer could be more difficult, depending on the situation.

Ability to obtain additional response-set information. With traditional paper and pencil surveys researchers only can know the results of the responses. Using the Web, researchers can learn about the respondents' answering process (Bosnjak & Tutan, 2001). For example, researchers can identify the number of people who viewed the survey compared with those who completed it, or if the software will allow, the number of people who started the survey but did not complete it (Bosnjak & Tuten). Information such as time of day or day of the week of the response also can be tracked.

Limitations of Web-based Surveys

In spite of the many advantages of web-based surveys, concerns about their use have been raised in the literature. These concerns focus on the following limitations: representativeness of the sample, response rates, measurement errors, technical difficulties, and accessibility issues for persons with disabilities.

Representativeness of the sample. Internet use in the United States continues to grow. In one month alone (September, 2001), 143 million Americans (54%) used the Internet, representing a 26% increase over August of 2000 (CyberAtlas, 2002). In spite of this growth, access to the Internet remains unequally distributed over the U.S. population. Most Web users are white (87.2%), male (66.4%), married (47.6%), and highly educated with almost 88% having some college and over 59% having obtained at least one degree. Additionally, 48% of Internet users are 35 years old or younger (Graphics, Visualization, and Usability Center, 1999). There are, however, recent reports that suggest the demographics of Internet users are becoming more inclusive. Annual growth rates for 1999 and 2000 were 25% for Internet use by individuals in the lowest income households (less than $15,000 per household per year). Additionally, Internet use among African Americans increased at an annual rate of 33% during 2000 and by 30% for Hispanics (CyberAtlas, 2002). Nevertheless, it remains the responsibility of the researcher to insure that all members of a defined population have equal access to the technology needed to complete the survey (Dillman, Tortora, Conradt, & Bowker, 1998). To the extent that certain portions of a population are excluded, the generalizability of the survey is compromised.

Response rates. Several studies using web-based surveys have found lower response rates than traditional mail surveys (Medin, Roy, & Ann, 1999; Nichols & Sedivi, 1998). However, unless the web-based survey uses a sampling method that allows only certain individuals to access the survey, it is impossible to know the response rates. For example, when participants for electronic surveys are recruited via newsgroups or search engines, researchers are not able to pinpoint the number of individuals who received the information and therefore cannot determine response rates or speak to the representativeness of the sample (Schleyer & Forrest, 2000). To circumvent this difficulty many web-based surveys make use of an initial e-mail to a targeted group that contains a specific URL to access the survey. This e-mail also can include an access code, password, or PIN to ensure that only those who have been targeted can complete the survey and to prevent any individual from completing the survey more than once (Wyatt, 2000). Researchers are cautioned, however, not to make the web-based survey too difficult to access with too many codes and passwords, as this added complexity can lower response rates (Cartwright et al., 1999).

To reduce the problem of lowered response rates, several researchers have advocated a system of multiple reminders. This can be done easily if the original solicitation was done via e-mail. Kittleson (1997) found that it was possible to double response rates with e-mail follow-up reminders, but others have claimed more modest success (Solomon, 2001)

Measurement errors. Very little is known about the psychometric implications of moving a survey from traditional paper and pencil to an electronic format (Arnau et al., 2001). Bowker and Dillman (2000) found that the placement of the electronic survey on the page (left-aligned, right-aligned) affected the respondents' reactions to the survey, with some who received the right-aligned survey stating they were confused and rating the design unfavorably, although the placement did not affect response rates. Wyatt (2000) cautioned that the effects of design choices must be investigated, noting that in translating the survey from paper to electronic formats, items can be perceived differently by participants, thus affecting the validity of the survey. For example, not scrolling down to see an entire list of options in a list box or not understanding how to correct a mistaken response could affect survey results. Others argue that as long as the electronic survey format is similar to paper and pencil surveys, traditional surveys can appropriately be transferred to the web (Lazar & Preece, 1999).

Technical difficulties. Not everyone who completes a web-based survey will be extremely computer-literate, nor will everyone have access to the most up-to-date technology. Dial-up access is still the most popular method to access the Internet (80%; CyberAtlas, 2002), and 66.5% of Internet users have a connection speed of 56k or slower (Graphics, Vizualization, and Usability Center, 1999). As of April 2002, the most commonly used Internet browsers were Internet Explorer (90%, versions 4.x and above) and Netscape Navigator and related compatible products (5%, versions 4.x and above) (W3Schools.com, n.d.). Researchers using web-based surveys must ensure that their pages are easily downloaded and maintain their formatting in all types of software and hardware environments. Additionally, formatting issues such as open-ended questions or questions arranged in tables can lead to higher drop-out rates, as can the absence of clear navigational aids (Bosnjak & Tuten, 2001). Notably, one study found that although sophisticated formatting can make the survey more attractive and interesting, surveys with advanced features and sophisticated designs (HTML tables, multiple colors, motion, sound) had a 5% lower response rate than simple surveys (black letters on a white screen) (Dillman et al., 1998). The authors noted that the sophisticated design was slower to load, particularly on older browsers, and some older browsers were more likely to crash when attempting to load the survey. It took respondents of the sophisticated questionnaire more than twice as long to complete as those who used the plain questionnaire. In another study, researchers developed a complex web-based survey. They found that although 523 potential respondents said they had access to the Internet, only 73 of those had the capability to respond to this technologically sophisticated survey (Nichols & Sedivi, 1998). The capacity of browsers to handle complex designs has undoubtedly improved since these studies. Nevertheless, although much more research clearly must be done, it still appears that there is a point at which adding more features to the surveys becomes self-defeating to response rates. Piloting the survey with a representative sample of the population and on a wide variety of computing formats should help to reduce these difficulties (Wyatt, 2000).

Lack of accessibility for persons with disabilities. Printed material presents problems for persons with visual impairments (Job Accommodation Network, 2002) and web pages can present special problems unless they are properly designed. Surveys are rendered as forms in HTML and forms can be handled well by recent versions of computer screen readers (e.g., JAWS from Freedom Scientific) or special software designed to read web pages (e.g., HomePage Reader from IBM). Many web pages were not created with accessibility in mind (Wheaton, Chovan, O'Briant, & Howell, 2001). However, resources exist on designing accessible web pages (e.g., the Web Accessibility Initiative (2002); World Wide Web Consortium, 1999). As Wheaton et al. noted, most problems are easily repaired.

Web page authors should provide information about the survey through a link from the home page. Such information should be linked from the top of the home page and be written in straight text. It should include information about the structure of the site by telling readers what is included in the survey (e.g., "The survey contains multiple choice and fill in the blank questions"), navigation tips ("Move between the fields by hitting the Tab key"), and how to contact the authors if help is needed. A simple and effective service is to provide a help line where the person can call and the form can be filled out. No names need to be given for this service so anonymity is maintained. It should be noted that web-based forms are more accessible than paper forms (which are just pieces of paper to persons with no vision) because the assistive software can read them as long as simple web design templates are followed.

Sample Study

Researchers wishing to use web-based surveys must consider the advantages and limitations addressed above in order to determine whether their research needs can be met with a Web-based survey. In this section of the chapter, we will discuss a sample study using a Web-based survey with recommendations for designing, implementing, and analyzing the results. The study was conducted by the authors in the autumn of 2000 (Wheaton and Granello, 2001) and distributed to employees of a large state agency, which had its own e-mail system. Participation was voluntary but strongly encouraged by the agency administration as the results would be used to determine the training needs for all staff over the next three years.

Study Design

In this study, we wanted to ascertain the training needs of all employees at the state agency. To accomplish this, we wanted to develop a Web-based instrument that would be easily understood and accepted by the recipients, allow for questions in a wide variety of formats (e.g., Likert-type scale questions, rank ordering questions, and open-ended questions), and be tailored to meet the needs of the various employees of the agency.

Although all participants were employees of the agency, there were really four different groups of employees, based on major job classifications. The four groups had both overlapping and discrete training needs. Thus, there were really five sets of questions that needed to be asked, one set that was common to all participants and four additional sets that were specific to each group. In addition, we wanted to conduct follow-up phone interviews of volunteers, but we wanted to ensure the anonymity of those volunteers. Therefore, we could not ask for identifying information on the survey.

Development of the Instrument

We chose to develop the questionnaire in Microsoft FrontPage, a commonly used and widely available web page authoring tool available in the Microsoft Office suite of programs. We also chose FrontPage because we had used it on many other occasions and were familiar with the product and the construction of forms within it. FrontPage allows for up to 256 questions, so it was ideal for our purposes.

The final instrument consisted of 166 questions. Sixty-four questions were in the general section and 13, 43, 16, and 30 questions in the specific sections for the four groups, therefore no person had to answer all 166 questions. The number of possible questions for each person ranged, depending on employee classification status, from 77 to 107. Participants were instructed to answer the first 64 questions and then click on one of four internal links, one for each of the four employee groups. Clicking on a link took the user to the appropriate section. When they reached the end of the questions for their employee groups, participants were asked to click on a submission button, which caused the form to be submitted. When the form was submitted, the server recorded the data, the time of day, the date, and the Internet Protocol (IP) address of the computer submitting the form. When the computer had recorded the information, a confirmation messages was sent back to the sender.

We included the information on time, date, and IP address in order to check for multiple entries, not as a means of identifying the respondents. When piloting the survey, we found that there was no method available to prevent a person from accidentally clicking the submit button more than once, thus submitting the data more than once. This inadvertent error could easily occur during peak times on the Internet because sending the data took some time, even on a high-speed connection, and the confirmatory response added to the delay. When such delays occurred, respondents might easily have believed that they had not submitted the form properly and click again in order to resubmit. Adding the date, time, and IP address served as a cross check of the submission. If a person submitted the form twice,

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the date and IP address would be exactly the same, and the times of submission typically would be within a minute of each other. As a final check, all the answers would be *exactly* the same, as it was the same form that was being submitted every time. Identifying such errors was easy. We simply opened the data in a spreadsheet program and sorted by IP address and time of submission. If duplicates existed, the IP addresses matched and the times would be within one or two minutes of each other. By collecting information on date and time of submission, we also were able to examine response patterns by time of day and day of the week.

There are two important data formatting issues that should be noted: data were saved as tab-delimited text and the names of the variables followed SPSS conventions (they began with a letter and were no longer than eight characters). Although FrontPage allows for the creation of a database that data can be saved to directly, we chose to examine the data with Microsoft Excel and SPSS. The tab-delimited format allowed the data to be quickly imported into both programs. To move the data into Excel, we opened the text file, chose "Edit" from the Menu Bar at the top of the page, chose "Select All" from the Edit menu, and then selected "Copy." We then opened Excel, placed the cursor in the A1 cell and chose "Paste" from the Edit Menu (or clicked on the Paste icon). To open the data in SPSS, we chose "Read Text Data" from the file menu (SPSS version 11.0) and checked the appropriate boxes that identify tab-delimited text. In both cases the variable names were saved and the data was automatically placed in the correct cells.

Finally, we needed a mechanism to identify volunteers while ensuring their responses to the survey were anonymous. We accomplished this by creating a "confirmation" page in FrontPage. This page thanked the participants for participating in the survey and then asked them if they would be willing to volunteer for a follow-up phone interview. Those who volunteered clicked on a link that took them to a new FrontPage form that asked for their name and phone number. We did not gather date, time, and IP address because that information could have allowed us to match the date, submission time, and IP address to the same data in the original survey, violating their confidentiality.

Thus, using a common software program, we were able to develop a complex survey that was tailored to the individual, maintained anonymity, allowed for quick and errorless entry of data, and allowed us to solicit volunteers for a follow-up telephone interview. Because the survey was anonymous, we could not control for multiple responses, although our experience is that people are much less likely to respond to a survey at all than to complete it more than once.

We also noted that persons needing assistance could contact the authors and the form would be filled out over the phone. Those requiring assistance did not need to give their names or identifying information to access this service. Because this was official agency business, they could use the agency phones for this call without cost to them.

Implementation

We "beta" tested the survey by completing the instrument ourselves from the perspective of each of the four employee groups and by answering every question, using all possible answers. This procedure checked for errors in coding and submission. We pilot tested the survey for errors in content, spelling, and grammatical syntax using a pre-selected group of agency employees. We also used this group to test the clarity of the instructions. These persons were instructed to take the survey "for real" and to note any errors or problems and report them to us. Although the agency used Windows 98 and Internet Explorer 4.0 on almost all their computers, we tested the survey on the Macintosh and Windows 95 machines and with both Internet Explorer and Netscape Navigator 4.0. We also tested the form using JAWS test-to-speech synthesizer for persons with visual impairments. The survey did not render well in JAWS so we instituted the telephone alternative. Only one person used this service, however, as most staff with visual impairments completed the survey with the assistance of their colleagues. Based on the pilot study, small changes were made in the instructions and some syntax errors were corrected. No difficulty was observed with any browser.

When the survey was finalized, notification was sent to the staff via the Internal e-mail system of the agency. Employees were instructed to go to the web site listed in the e-mail and complete the form. The initial announcement was sent at approximately 4:00 p.m. on a Thursday afternoon. After the initial announcement, we requested that additional reminders be sent periodically. Unfortunately, we could not access the agency e-mail system, so all our messages to the staff had to be relayed through two other persons. Moreover we were not part of the e-mail system so we could not verify if the e-mail reminders that we requested early in the process had been sent. We corrected the problem but not before over a week had passed.

We did not have a central "help desk" but provided both our work and home phone numbers so that assistance was available during working hours every day the survey was open. We checked the data daily to ensure the data was being submitted and entered properly.

Analysis

The total number of valid responses was 419 of the 1,136 persons to whom the survey announcement was sent, for an overall response rate of 37%. Three of the four groups had response rates over 40% (46%, 45%, and 41%), but the fourth group had a response rate of only 16%. (We attributed this lower response rate to the diversity of job classifications within this category and the belief of persons within this category that the training needs survey was not relevant to them, although this is highly speculative.) The first group (with a 46% completion rate) had completed a paper needs assessment survey three years before and had a similar response rate (45%). The other groups had not been surveyed agency-wide before.

As discussed above, in addition to the survey results, we gathered data on time and date of submission. Coupling this data with the reminder times and dates, we were able to graph response patterns for all our participants. These results are shown in Figures 1 through 3. Figure 1 displays the time of day responding. Figure 2 gives the date (with day of the week) of response. Figure 3 shows the range of response times for each day and adds the median time of response. Reminders are indicated in bold. Double question marks (??) by a date designates when reminders were requested but their actual delivery could not be verified. Dates marked with an asterisk indicate the dates and times when reminders were sent and can be verified.

Overall, it appears that response rates for three of the four groups were somewhat consistent with response rates for paper and pencil surveys, as determined by a meta-analysis of published research (Kerlinger, 1986) and consistent with meta-analytic results of web-based survey response rates (39.6%, according to Cook, Heath, and Thompson, 2000). For one employee group, response rates were consistent with an earlier paper and pencil survey for the same population. It also appears that reminders do influence response rates (see Figure 2). Moreover, Figure 1 suggests that staff were most likely to respond either when they first arrived at the office or just before they went home. Noting this trend, we reasoned that reminders should go out late in the day to catch people when they were most likely to respond immediately or so that the reminder would still be visible first thing in the morning, before the demands of the day began to impinge on the employee's time. To test this assumption, we sent out a reminder on Wednesday, September 20, at 6:00 p.m., and another on Monday, September 25, at 3:30 p.m. The response rate on September 21 was the highest of any give day (see Figure 2), and the median response time was 9:35 a.m. The response on September 25 was also encouraging with the median response time of 4:15 p.m. In addition, the median response time for the following day was 9:23 a.m. The number of people completing the survey was lower on September 25 and 26, but this may have been caused because of saturation (i.e., those who were going to respond had done so by that time).

Conclusion and Recommendations

Form development

We chose to create one form for all four employee groups. Given the large number of questions, this page would have loaded very slowly on a modem. In our situation all employees had access to high speed Internet connections, but researchers not having this luxury may consider breaking the form into its components and linking to the specific pages. By using one form, we also were able to link the general questions with the employee specific questions, giving us more information about each group.

Depending on how the data is to be analyzed, saving the data in tab-delimited format allows easy importation into spreadsheet programs such as Excel. Moreover, if a statistical package such as SPSS is to be used, making all the field names conform to the SPSS naming convention will allow SPSS to retain the variable's names. It should be noted that SPSS will import the data even if the variables are not named as SPSS mandates, but the variable names will be lost and replaced with generic names generated by SPSS, which will require re-entry by the researcher, a time consuming task that can easily be avoided.

Reminders

Although we had the severe limitation of not being able to control when reminders were sent at the beginning of the study, we were able to test our hypothesis about when was the best time to send reminders. From observation of the response patterns early in the study, we surmised that sending reminders late in the day or very early in the morning has the potential to be the most effective. We hasten to add that this hypothesis is as yet highly tentative for at least two reasons. First, the reminder of September 20 may have been the first reminder the staff received, notwithstanding the "bump" in responses on Tuesday, September 12, when we requested a reminder but did not receive confirmation that it was sent. If the September 20 reminder was the first, then perhaps those who had intended to complete the survey but had not done so now recognized that this was the time to carry out their intention. Second, we were not able to test sending out the reminder at other times of the day as we were near the end of the study. The response rates and median time of response do, nonetheless, lend support to the hypothesis that reminders late in the day can lead to higher response rates. Our study may have some limited generalizability because the population was a "closed" group. That is, all participants worked for a single agency and could be contacted in a systematic and controlled manner, a luxury that many researchers will not have.

Notwithstanding these limitations, this study provides researchers with suggestions for constructing instruments, tabulating the data, and increasing response rates. Hopefully, others can apply this information and web-based survey research can become more precise.

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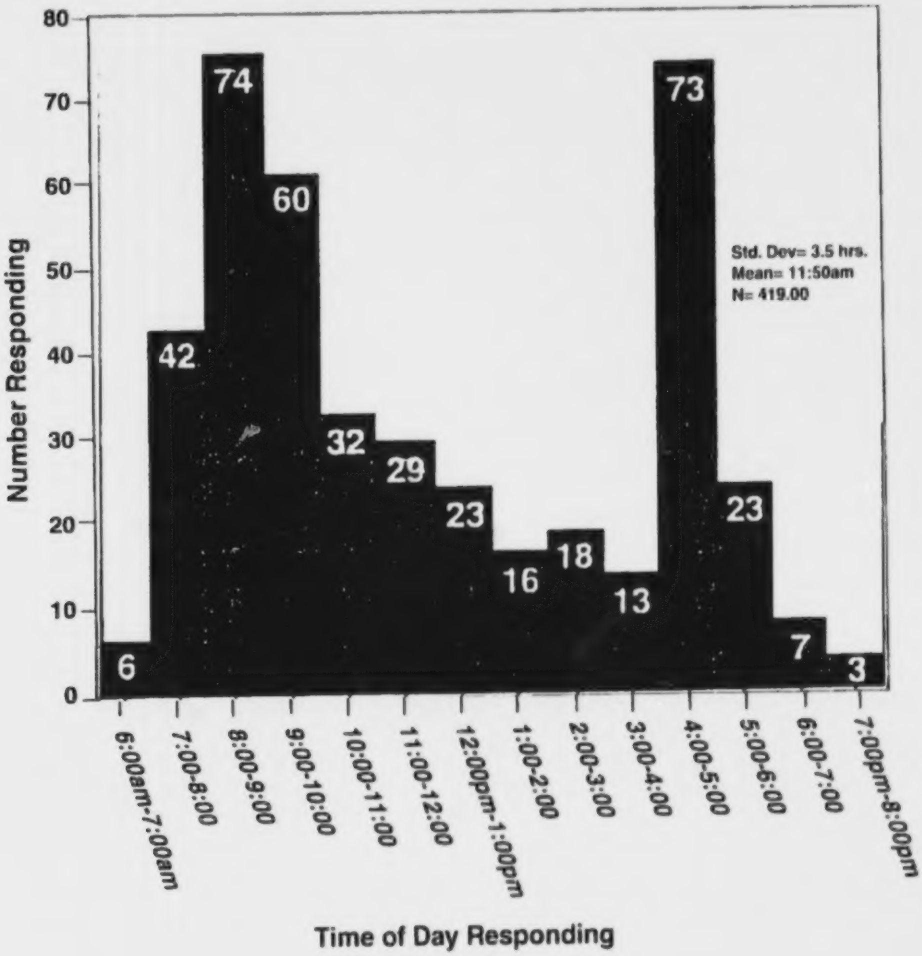
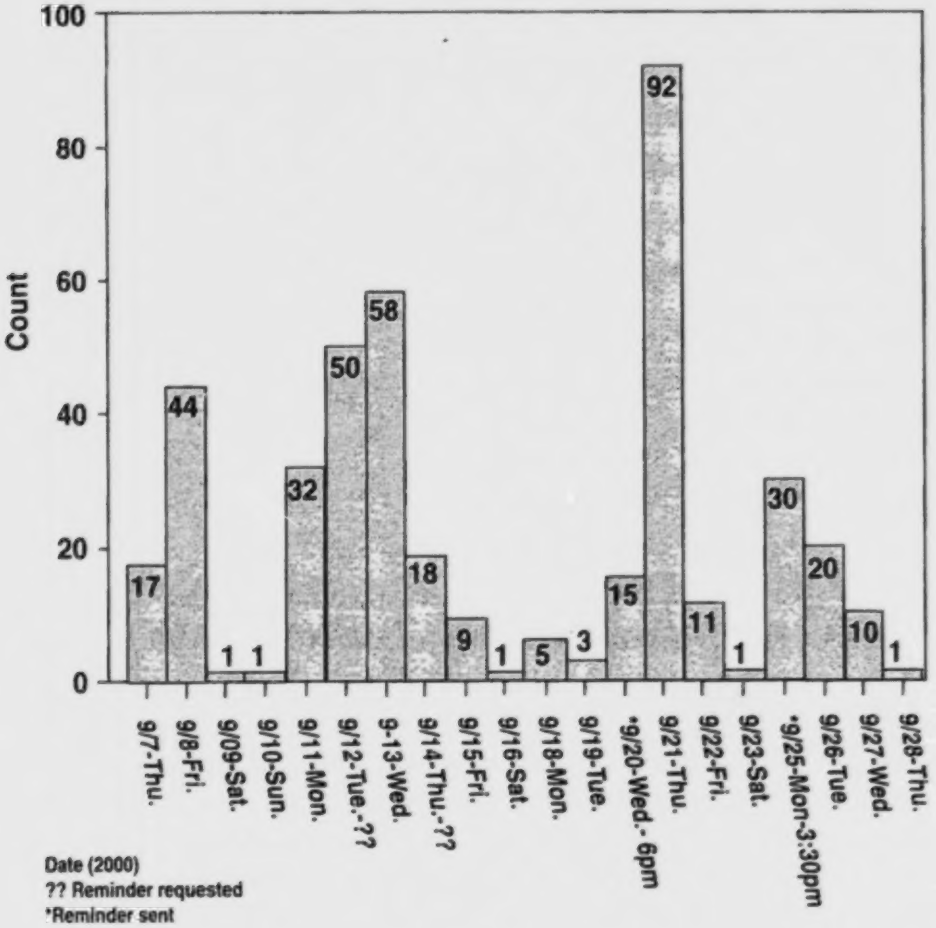
Figure 1: Time of day Responding



BEST COPY AVAILABLE

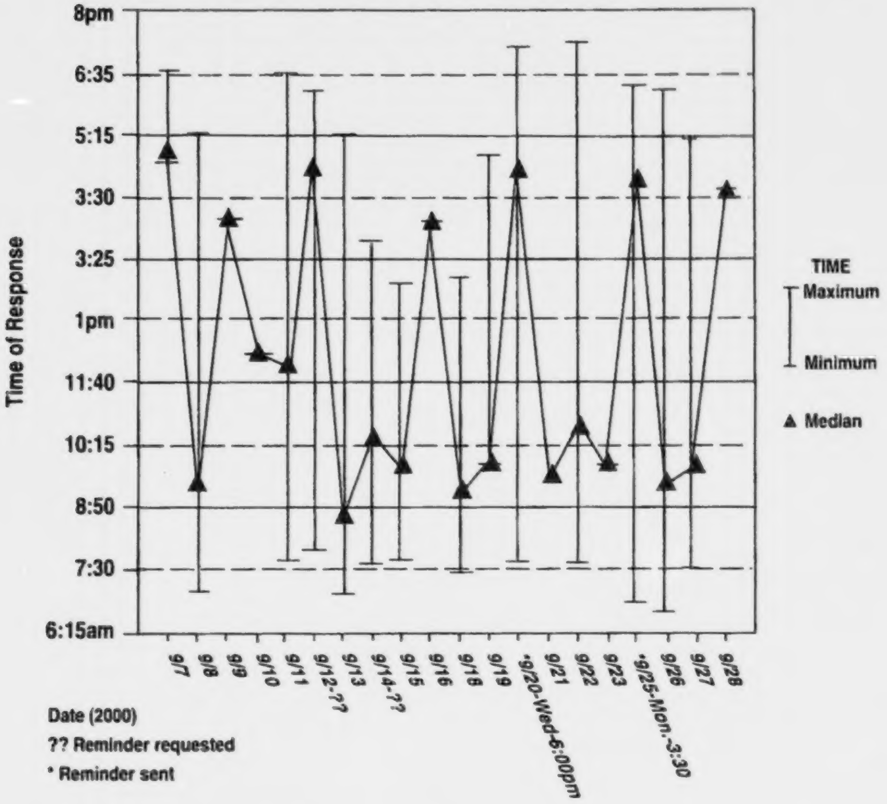
Figure 2: Response Rate by Day



?? Reminder requested
*Reminder sent

BEST COPY AVAILABLE

Figure 3: Range and Median Response Times by Date



Chapter Sixteen

Researching the Cybercounseling Process: A Study of the Client and Counselor Experience

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Few professions remain untouched by recent technological advancements (U. S. Department of Labor [DOL], 2000) and this cybernetic trend is also apparent in the mental health profession (Bowlsbey, 2000). There are increasing attempts to harness the potential of technology to provide mental health services online (Boynton, 2001; Collie, Mitchell, & Murphy, 2000; Haas, 2000; Jerome, DeLeon, James, Folen, Earles & Gedney, 2000; Sampson, Kolodinsky & Greeno, 1997). From Australia, Canada and Czechoslovakia to the United States, cybercounseling is an increasing presence on the Internet. The American Counseling Association (ACA) and the National Board of Certified Counselors (NBCC) predict that with society's increased comfort with technology, cybercounseling will continue to expand (Bloom, 1998). With more counselors attempting to offer services over the Internet (Boynton, 2001; Jerome, et al., 2000; Sampson, et al., 1997), it is imperative that counselors understand what is involved in the use of this emerging modality. However, there is little research to guide the implementation of training efforts or to identify appropriate cybercounseling strategies (Bloom, 1998; Guterman & Kirk, 1999; Stamm, 1998; Sussman, 2000). In addition, there is a need to investigate the cybercounseling experience from the perspective of clients and counselors.

The literature on cybercounseling is primarily theoretical and contains numerous recommendations for research in this area (Bloom, 1998; Lewis, Coursol, Khan, & Wilson, 2001; Sussman, 2000). This indicates an urgent need for empirical investigations to inform practice and guide policy development in cybercounseling. Jerome, et al. (2000) emphasize that developing guidelines for this treatment modality is an immediate necessity.

This chapter describes a brief counseling interaction that used Internet videoconferencing technology to provide cybercounseling. In this study, cybercounseling refers to counseling over the Internet via videoconferencing. The experience of the counselor and client during the cybercounseling process was analyzed using qualitative methodology. In addition, the chapter describes the skills and competencies used in the practice of cybercounseling. Suggestions to guide practice and implications associated with cybercounseling are discussed.

Methodology

Participants

The participants included two female graduate students who were enrolled in a counseling graduate program at a public university in the Midwest. Participant selection was based upon the following criteria: Counselor: (a) had completed core classes such as the introductory and advanced counseling skills courses and was in a supervised internship and (b) had some knowledge of technology; Client: (a) had completed the introductory counseling skills class and (b) had some knowledge of technology.

The counselor was a 58-year-old Caucasian woman who was in the second year of a Community Counseling master's degree program. The client was a 29-year-old African American woman who was in the first year of a Community Counseling master's degree program. In a self-report of their level of technological competence, the counselor indicated a beginner level of computer expertise and the client indicated an intermediate level of computer expertise.

Prior to the project, participants were briefed on the purpose of the study and on their role in the project. Both participants agreed to maintain confidentiality about information acquired during the process. Participants were informed that they could withdraw at any time during the progress of the project. In addition, participants agreed that if they experienced any negative feelings during the project, they would inform the principal investigators and seek assistance with a helping professional of their choice.

Procedure

Prior to the commencement of the study, the participants received training in the use of videoconferencing until they were comfortable using the technology. The training was provided to ensure that technology was not a mediating variable during the cybercounseling process. The participants also completed a demographic sheet that included information about their age, gender, ethnicity and comfort with technology.

The second year graduate student was the counselor in a session similar to a counseling skills training class. The first year graduate student, who was the client, presented with a career problem similar to the problems presented in a counseling skills class. A private counseling room was established in cyberspace and the counselor and client met for three sessions of brief counseling at pre-arranged times for 45 minutes a week. The cyberroom was established prior to the first counseling session and at the assigned time the client and counselor entered the room using a password.

Analysis

At the end of each counseling session the principal investigators interviewed both the counselor and client to document their experience during the counseling process. The first two authors of this article conducted the interviews. A list of topics with sample questions was developed to avoid the use of leading questions by the interviewers. The interviewers used probes, follow-up questions, feedback, and reinforcement techniques during the interview process as suggested by Patton (2002). Participant responses to the questions were not restricted in any way during the interview process. The interviews continued until each participant indicated that they did not have additional information to offer. Each interview averaged between 60 to 75 minutes in length.

The first author of this article transcribed all of the interviews conducted with the participants. Patton (2002) suggests that such transcription enables the researcher to acquire a better understanding of the experience of the participants. The three authors of the study reviewed the transcripts independently to identify the main themes in the interviews. Once the independent analyses were completed, the findings were compared and the themes identified by all three researchers were retained. To validate these findings, the themes were shared with the participants. Based on the feedback from the participants information was added, deleted or modified as necessary.

Results

To provide a clearer picture of the experience of the participants during the cybercounseling process, the themes that emerged from the interviews are discussed separately for counselor and client.

Counselor Experience

Theme 1: A Two-Dimensional Experience

The counselor described cybercounseling as a "two-dimensional process" where she could see and hear the client, but could not sense or feel her presence. The counselor noted that the counseling experience felt "flat". While it was possible for the counselor to experience the client through audio and visual cues, she could not sense the energy that is typically generated when in close physical proximity with a client.

The cybercounseling experience was described as having a "surreal" quality that was characterized by a "lack of depth". The counselor reported experiencing an underlying feeling of physical and emotional distance. Even though cybercounseling was in real-time, the counselor's experience in the interaction did not feel real. The counselor's experience is captured in the following comment:

> ...what hit me was its two-dimensions...sort of that realization [etc.]

Theme 2: Accepting Cybercounseling as a Different Experience

When the counselor recognized and accepted that cybercounseling was not going to be like traditional face-to-face counseling, there was greater comfort with the experience. The acceptance of cybercounseling as a different type of experience from face-to-face counseling allowed the counselor to feel more relaxed about the interaction. The more the counselor was involved with the cybercounseling process, the greater was her comfort with the experience. The following quote reflects the counselor's experience.

Well, I certainly felt a lot more comfortable and maybe she felt a little uncomfortable. It worked for me this time and I said, 'Maybe it worked last time but I felt more comfortable with it.' I think part of this is accepting that it is going to be different.

Theme 3: Increased Focus on the Cybercounseling Process

As the cybercounseling sessions progressed, the counselor found that she was more focused on the counseling process. The counselor began to concentrate more on her interactions with the client and the progress of the sessions. The counselor expressed that she was concerned about the client's perceptions of her and whether the client felt understood. The following quotes reflect the counselor's experience.

> I thought, 'No, that's more of a counseling question'...Then, I found myself wondering, 'Hmmm, should I have done that? Should I have said that? More of a counseling question of my skills than it is the technology, the process of cybercounseling.'

> I mean...'OK, there were two issues that came out of the first session and we would work on those andÖ see how things were going.'

Theme 4: Counseling Relationship Lacks Emotional Connection

The counselor described a "good" counseling relationship that was based on the participants' abilities to communicate with each other. The counselor felt that she connected with the client on a cognitive level and that they were able to understand each other. The counselor was able to comprehend the client's issues. However, the counselor also noted that there was no connection on an emotional level with the client; that there was no sense of intimacy between them. The counselor reported that although it was possible to see, hear and even understand the client, the emotional connection between them was missing. The counselor felt that the emotional closeness that comes from physical proximity was absent in this experience. Though the counselor related well to the client on a cognitive level, the emotional connection was not present. The following comment by the counselor illustrates this point.

> Well, I felt that the relationship was good. But, you know, there is that kind of two-dimensional thing. There is a lack of...connectedness...I call it the lack of intimacy because you can't see the whole body and today all I really saw was her head.

Theme 5. Need to Modify Counseling Skills

The counselor reported that while she employed basic counseling skills, they had to be adapted to suit the cybercounseling process. The counselor described modifying her counseling skills because she found they did not have the same effect in cybercounseling as they did in face-to-face counseling. The counselor reported having to modify two skills in particular, silence and listening, during the cybercounseling process. This comment by the counselor illustrates her experience.

> Yes, the skills that one has to learn for counseling face-to-face I've still used, but because it was cybercounseling, they had to maybe be adjusted or I had to be aware of them in a different way.

The need that the counselor felt to modify her counseling skills was particularly true for the skill of silence. The counselor's perception was that silence did not seem to work in the same way as it did in face-to-face counseling. The counselor reported that it was difficult to read the silences that occurred during the cybercounseling process because of the time lag in the audio and video transmissions. The counselor found it difficult to distinguish between client silence and a transmission lag time. Consequently, the counselor felt that there were some instances when she may have interrupted the client. The counselor noted that she had to learn how to use silence during the cybercounseling process. The counselor described her experience as follows.

> Oh, I knew it was going to be different, but I didn't know how different it was going to be. And, I didn't know how I would feel about the differences. So, I think as I get into this... silence doesn't work the same way in cybercounseling as maybe it does in a one-on-one, in the same way during emotions.

Another skill that the counselor described modifying during the cybercounseling process was listening. Even though cybercounseling was an audio-visual experience the counselor felt that she had to listen very intently. In fact, the counselor noted that her listening skills were heightened during the cybercounseling process. The counselor explained that she had to listen attentively because the non-verbal cues were not always easily visually accessible. This made it difficult for the counselor to become aware of the subtle nuances in communication that facilitate the counseling process. The lack of audio clarity and the time lag that occurred during the transmissions forced the counselor to listen more intently. The following counselor comments illustrate this theme.

> I think I said last time. It really heightens, in that I found that I had to really listen, I had to really focus. There was... some, how do I put this, some time lag with the audio, which I think could be distracting, but you have to pace yourself with that and adjust for that.

Theme 6. Technology Affects the Process

The counselor noted specific aspects of technology that affected the cybercounseling process. One aspect of technology was the time lag that occurred during the audio-video transmissions. The counselor had to learn to manage the delay that was evident between the time when the client spoke and when the counselor heard her. The following statement illustrates this theme.

> There is a lag in this. In the transmission. I felt there were times when I wanted to summarize something and I think that in [an] actual session I wouldn't, I wondered if I was being very intrusive and interfering, I mean...because it was like I wanted to summarize and I thought there was a pause and then she was .....

Another effect of technology was that it was not always easy for the counselor to read the non-verbal cues of the client. Because the video image of the client only included the shoulders upwards, the counselor found it difficult to read the non-verbal behaviors of the client. In addition, the visuals were not very clear and this added to the difficulty of reading the body language of the client. The following quotes explain the counselor's perspective.

> Well, when you are doing cybercounseling you don't always see all the little nonverbal sort of nuances. This time I just accepted that.
>
> Because I think that I became so aware of not being able to [see] the nonverbals not coming across as clearly, and some of them you wouldn't see them at all.

Client Experience

Theme 1: More Comfortable than Face-to-Face Counseling

The client described cybercounseling as a less awkward and less intimidating experience than face-to-face counseling. The client felt that it was less threatening because the counselor was not physically present. In cybercounseling the client did not experience the pressure that is generated by sharing the same physical space with the counselor. The client felt that she was not under pressure to respond in the same way she did when she was in close physical proximity with a counselor. The client expressed having more freedom not to share information when she was in cybercounseling. The following quote illustrates the client's experience.

> From my experience, the uncomfortableness of going into a room where when you are doing the face-to-face counseling, the power aspect of the fact that, I feel that when you walk into the room the counselor definitely has that [power] when its face-to-face. Whereas, with the technology, it didn't seem to be the case for me. And, the comfort level was much more there than it was in face-to-face.

Theme 2: Unexpected Depth of Emotions

The client reported some surprise about the feelings she experienced as part of the cybercounseling process. The client was astonished that she experienced such depth and intensity of emotion while addressing her issues in cyberspace. The client felt that the counselor was able to facilitate a deeper emotional experience than she expected. The client had not conceived that this could possibly occur in cybercounseling. The surprise of the client at the strong emotions that were experienced during the cybercounseling process is embodied in the following comments.

> Because I've talked to people in class before today. It's like... [it] is somewhat of a moving experience or something compared to...the other times when I've done counseling. And I'm pretty straightforward and honest when I'm in those counseling sessions. I talk to them about whatever is going on at the time, and so I think that that surprises me that we are doing this with this technology and I would really have these feelings.
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> I keep reflecting on other sessions I've done and where its been... with people within the room with me, and we are doing counseling, and I can't say that I've felt that before. And I keep trying to think back to... make sure before I make that statement, but I can't say that I felt that before...even with having someone in the room.

Theme 3: Immersed in the Counseling Process

The client described becoming more involved in the counseling process as her issues became the focus of the sessions. The client's perspective of the cybercounseling process was that it gradually came to feel like face-to-face counseling. By the third session, when the novelty of cybercounseling had disappeared, the client began to think of the experience as counseling. In fact, she described "feeling more like a client". The following quote explains the client's perception of the process.

Because initially...it was...the excitement of doing this new stuff and then...the next time it was as it was still new, but I was able to totally get into the counseling session once we got started. But this time we just went into counseling. I went into counseling.

Theme 4: Empowerment

The client described feeling a sense of empowerment during the cybercounseling process that she did not experience during face-to-face counseling. The client reported that the counselor "directed the session but was not in charge of it." The client felt that in cybercounseling she had the power to decide how to respond to the counselor. The technology that allowed the client and counselor to meet in a neutral place like cyberspace gave the client a sense of being in control of the process. Having a sense of her own space also made the client feel in command of the experience. The following statements illustrate the client's experience.

> Like I said before, it gives me choice. I'm allowed to make some decisions in this, in this session before it even starts. Yeah, I'm empowered to do some things; I'm empowered to set up my things the way I want them and to basically start the session when I'm ready.

> I didn't feel that the counselor was totally in charge and I think it has to do with, and I used this before, coming into her office. I don't come into her office. She actually comes into [mine] because I'm already sitting there and I'm comfortable where I am and then she comes in.

Theme 5: Equal Relationship, Different Connection

The client reported that she had developed an egalitarian relationship with the counselor during the cybercounseling process. The client characterized the client-counselor relationship as an "equal" one in which there was freedom to make choices and where she was in control of the counseling experience. The client felt that the counselor listened to her and understood her perspective. Despite considering the client-counselor relationship as "equal," the client did not feel a strong emotional bond with the counselor. The client explained that she did not feel the kind of connection that one has when the counselor is physically present in the same room. She described the cybercounseling client-counselor relationship as similar to the connection experienced with a person on the telephone. The following quote expresses the relationship that the client had with the counselor.

> The only way I could explain it is just that we have that, the human being, person looking right at you... I don't feel the...I guess it's the connection. I don't feel the connection that you feel when the person is in the room, or it's just when I think about something when I'm online and if I'm, you know, I have, I'm using the web camera and I can talk and e-mail and all of that, its not the same as if that person were right here in front of me talking to me.

Theme 6: Skills that Facilitate

The client experienced the cybercounseling interaction as more than just the use of listening skills. The client noted that the counselor used a variety of skills to facilitate the cybercounseling process. Some of the skills that the client identified included attending skills, empathy, summarization, reflective listening, and probes. For instance, the client commented that when the counselor reviewed the previous session she felt that the counselor had paid attention. The experience of the client is expressed in the following quote.

> It's more than just listening, its, I mean, the thing is that she's able to see past the specific issue that I'm sharing with her, and I guess go a little forward. She does, she probes to see, ok, is it this, is it just this or is... it something else. Because, we initially started out talking about something totally different than what we ended up talking about.

Theme 7: Listening is Key

The client reported that she used the skill of listening extensively during the cybercounseling process. The client observed that she was more concerned with listening to what the counselor said than to the counselor's non-verbal behaviors. The client described being more absorbed in listening to the counselor as she wanted to hear what was said. By listening closely the client reported that she could hear concern in the counselor's voice. The client indicated that although some of the non-verbal behavior of the counselor was visible on the screen, she did not focus closely on them. The only time the client described attending to non-verbal behavior was when the counselor engaged in some action that attracted attention. The experience of the client is illustrated in the following quote.

> But for some reason, the technology I, I was paying attention to what she was asking me, but it was more like I was, you know, listening with my ears rather than, you know, I didn't do a whole [lot] of just the eye-to-eye contact when she asked questions.

Theme 8: Technology is Secondary to Process

The client explained that she was less aware of the technology as the cybercounseling process progressed. In fact, the client found that once she was immersed in the counseling process she did not attend to the technology. The client stated that she paid limited attention to the technology in the second and third sessions. By the third session the client described technology as "a non-issue" and more as a vehicle by which to reach the counselor.

The client reported that the only time that she noticed the technology was when there was a technical glitch that caught her attention. This point is illustrated in the client's observation after the final session where she notes that she was more focused on the counseling process than on the technology.

> For me, after two sessions, it was totally a non-issue. The second one was still a little new to me, but by the third session we just started the session and I went there to, and I set up the computer just to start my session and that's that was it, until the end, when it was time to close it out.

Discussion

The results of this study have implications for the practice of cybercounseling and for counselors who contemplate engaging in this emerging modality. In this study both the counselor and client observed that cybercounseling was a different type of experience from traditional face-to-face counseling. The counselor described cybercounseling as a two-dimensional process where it was possible to see and hear the client. Meanwhile, the client indicated that cybercounseling was a less threatening experience than face-to-face counseling as she felt that there was less pressure to respond because the counselor was not physically present.

Such findings suggest that counselors are more likely to feel greater comfort with this modality when they accept cybercounseling as a distinct experience from traditional face-to-face counseling. Given the unique features of cybercounseling, counselors cannot expect to transition effortlessly into cybercounseling merely because they are trained in face-to-face counseling. In fact, the counselor in this study indicated a desire for more opportunities to practice cybercounseling before she actually engaged in the process.

A related implication is that counseling techniques may need to be adapted to the unique features of the cybercounseling process. To be effective, counselors will need to adjust their counseling skills, such as silence, summarization, and immediacy to the cybercounseling situation. One of the skills that both the counselor and client in this study emphasized was that of listening. The counselor indicated that the ability to listen carefully was a key element in cybercounseling especially as it was often not easy to read the non-verbals of the client.

Another skill that manifested itself differently in cybercounseling was that of silence. The counselor described silence as not facilitating the cybercounseling process in the same way as it does in face-to-face counseling. In addition, the counselor had to learn to distinguish between silence on the part of the client and a time lag during transmission.

Given these results, one strategy that can facilitate and enhance the cybercounseling process is the more frequent use of immediacy. As counselors inquire more frequently with clients about the process, this approach will allow them to better assess the progress of the session and the experience of the client. Counselors can also employ the skill of summarization more often to let clients know that they have heard and understood their perspective. This will allow clients to feel that they are active participants in the cybercounseling process.

Obviously, it is to the advantage of counselors to receive some form of training in cybercounseling so that they are comfortable with the process and develop a comprehensive understanding of cybercounseling. Such training would allow counselors to recognize that counseling skills have a different effect when cybercounseling than when being traditional face-to-face counseling. It would also allow them to learn to troubleshoot effectively when there is a technical difficulty.

The results of this study also suggest that clients are likely to react more positively about the cybercounseling process than their counselors, as it allows clients to address their concerns in a less threatening environment. Such perspectives are probably reflective of broader societal attitudes where clients may be more interested in participating in cybercounseling than previously thought (Boynton, 2001). Haas (2000) suggests that because cybercounseling does not contain all the elements that counselors have come to expect in face-to-face counseling such as the presence of non-verbals, it does not mean that cybercounseling cannot be effective. In fact, Powell (1998) suggests that the advantages of uninterrupted care or the longer relationship between the client and counselor that is possible in less costly cybercounseling may outweigh the initial lack of intensity in the client-counselor alliance.

Another interesting finding of this study was that both the client and counselor indicated that though they had a working relationship, they did not experience a strong emotional connection with each other. In cybercounseling, the client and counselor have a relationship that is based upon the participants' abilities to understand the goals and tasks of counseling. Therefore, counselors who engage in cybercounseling may find that though they can see and hear the client, the emotional connection that is an integral part of face-to-face counseling is not apparent. The lack of emotional connection appeared to have interesting ramifications for the counseling process. The client reported a greater sense of control over the counseling process in that she had the freedom to make choices. While the client acknowledged that the counselor directed the process, she did not perceive the counselor as "in charge" of the session. Thus, the client perceived an equal relationship and was more empowered during the counseling process.

Conversely, the lack of connection in the client-counselor relationship was uncomfortable for the counselor as it made it difficult for her to assess the progress and effectiveness of the counseling process. The counselor also reported that she felt less in control over the counseling process. For counselors trained in face-to-face counseling, this lack of emotional connection is one aspect that will require adjustment. Given the difficulty in establishing an emotional bond with the client during cybercounseling, counselors may need to focus on other aspects of the working alliance such as the goals and tasks of counseling in order to strengthen the existing working connection they have with their clients.

The results of this study have important implications for the manner in which the counseling profession addresses the issue of cybercounseling. It is impossible to tell when technology will arrive at a point where it will capture the elements of face-to-face counseling. However, it is important to note that some of the technological problems that were identified in this study may become less of an issue with Internet2 and its related applications. Offering greater bandwidth, latency, Quality of Service (QoS) protocols (Salpeter, 2002; Van Horn, 1998) and such applications as full-size video (Salpeter, 2002; Van Horn, 2002) and tele-immersion (Ditlea, 2001; Lanier, 2001), these Internet2 initiatives will address many of the challenges associated with cybercounseling. Optimistically, when tele-immersion, with its three dimensional quality (Lanier, 2001), becomes affordable for the general populations, the client and counselor are likely to experience greater authenticity in their interaction. Ditlea (2001) suggests that with tele-immersion, participants may finally have the ability to interact more realistically with each other, giving new meaning in counseling to the concept of "high tech, high touch."

Until then, the counseling profession will need to determine how to incorporate the practice of cybercounseling to best serve clients. One possibility is to consider cybercounseling as a mechanism for follow-up contacts or for contacts between sessions.

Another option is to develop a hybrid counseling experience for clients who lack easy access to mental health services. Instead of an extended interlude between sessions, counselors and clients can alternate between face-to-face and cybercounseling sessions. Such an approach has the advantage of allowing the client-counselor relationship to develop the emotional bond that is not apparent in cybercounseling.

With the limited investigation into the application of videoconferencing to the cybercounseling process, it is premature to conclude whether it is an appropriate form of counseling. However, as a number of counselors offering services online increases (Bloom, 1998; Hughes, 2000), there is an urgent need for further investigation into the process and outcome of this modality.

Implications for Practice

At the moment, cybercounseling is new and largely uncharted territory and there are practical implications that require serious consideration by counselors. Based on the results of this exploratory investigation, initial recommendations are provided for the set-up and for the process of cybercounseling. It is important to recognize that these suggestions are based on the results of this study and are not all-inclusive.

Cybercounseling Set-Up

The recommendations for the set-up of cybercounseling address technical and non-technical issues. Among the technical issues that require consideration in cybercounseling are those related to the selection of technology software and hardware. A variety of software packages, web cameras, microphones and Internet connection options are available. In videoconferencing, the quality of audio and video reception will depend upon the hardware and software selected. In addition, the mode of Internet connection (cable modem, satellite modem, digital subscriber lines, or dial-up modem) will greatly impact the quality of the sound and picture.

Not surprising, counselors can expect to sometimes experience technological difficulties with audio and video quality. Common audio problems include sound distortions that, at times, make it difficult for the participants to hear each other. Proactively, counselors may want to emphasize that clients should ask them for clarification whenever there is an audio distortion. In addition, clients should be aware that they might have to repeat information when the counselor is unable to hear them.

Another technical concern is the time lag in audio and video transmission. If cybercounseling is a new experience for participants, the counselor and client may need to adjust to the digital quality of the audio and the time lag. Depending upon the hardware, the audio can be limited in its ability to capture subtle voice inflections of the participants. In addition, the participants have to learn to distinguish between a transmission lag and a moment of silence during the cybercounseling interaction. Such conditions may not always make it possible to identify the emotions that the client experiences during the cybercounseling process.

While the video allows the participants to see each other, it provides a restricted picture that often extends from the shoulders upward. Therefore, it is difficult for participants to read non-verbal behaviors that are essential for better communication between the client and counselor. Consequently, the counselor may find it more challenging to get an accurate read of the counseling process and the experience of the client.

Another practical issue is the inability to guarantee security of information in cybercounseling. A common suggestion for addressing this problem is the use of encryption software to protect the information that is transmitted over the Internet (Bowman & Bowman, 1999; Sampson, et al., 1997; Sussman, 2000). While these programs provide some degree of protection, they cannot guarantee complete security. It is important to note that this may be less of an issue with videoconferencing that involves point-to-point communication, than with other forms of cybercounseling. Another suggestion is that when using videoconferencing to conduct cybercounseling, counselors can establish a private cyberroom that can only be accessed with a password.

Given the possible technological challenges, proactive approaches include addressing the procedures for managing these issues on the counselor's website and also in the initial cybercounseling session. The website can describe the technology required for the cybercounseling process including hardware, software, and connection requirements. Suggestions for setting videoconferencing software preferences, ensuring the computer is not in sleep mode, and a description of the cybercounseling process can also be provided.

An important non-technical issue that deserves consideration is the limited research about cybercounseling. Given the limited investigation into cybercounseling, it is critical that counselors are aware of the ethical, legal and practical issues related to its practice. These issues are addressed by various professional bodies including ACA (www.counseling .org) and NBCC (www.nbcc.org) and are available on the Web.

Relatedly, counselors may want to carefully consider the kind of issues that are appropriate for cybercounseling. Again, there is limited research that identifies the problems that are appropriate for cybercounseling interactions. The NBCC (1997) recommends that mental health issues such as relationships that involve violence and psychological conditions that include problems with reality distortions are not appropriate for cybercounseling. Cybercounselors should specify the problems that can be appropriately managed through their Internet practice and those problems that are not suitable for this modality (Manhal-Baugus, 2001). Prior to the initiation of the cybercounseling sessions, counselors may want to gather pertinent information about their clients. Such information should be collected before the first session through an intake procedure such as an online intake form, a telephone intake or preferably a videoconferencing intake session. The counselor can solicit information such as age, gender, presenting concern, client experience with counseling and the location of the client.

Another issue to consider before counselors begin cybercounseling is whether counselor licensure is required for treating clients in certain states. For instance, California recently passed legislation that mandates that only clinical psychologists and medical practitioners licensed in California can provide cybercounseling to state residents.

Cybercounseling Process

Counselors also need to be aware of several issues about the process of cybercounseling. One aspect that may require modification is the structuring of the cybercounseling experience. In addition to what is typically addressed in face-to-face counseling, structuring of the initial cybercounseling session should address security, confidentiality, informed consent, billing procedures, client contact between sessions, the protocol for managing technical problems, policies for session cancellation and post-counseling contacts. In the final session, counselors can review post-counseling and follow-up contact procedures.

Another challenge of Internet videoconferencing is that the video feature may distract some counselors. The ability to see themselves on the screen can initially divert the attention of neophyte cybercounselors from their clients. To prevent focusing on their image rather than on their client, counselors may want to consider closing their video window to avoid distraction.

While the audiovisual properties of cybercounseling are an advantage, neophyte cybercounselors should note that their behaviors are clearly visible to the client even though they are physically separated. Consequently, counselors may want to avoid engaging in any behavior that is not appropriate for face-to-face counseling.

No discussion of cybercounseling is complete without some reference to the ethical and legal issues that pertain to this process. The ethical and legal issues associated with the practice of cybercounseling are consistently documented in the literature. While an in-depth discussion is beyond the scope of this article, readers should note that several examinations (Attridge, 2000; Bloom, 1998; Hughes, 2000; Manhal-Baugus, 2001; Sussman, 2000) of the ethical and legal issues related to cybercounseling are available. Professionals considering counseling on the Internet may want to acquaint themselves with these discussions as the information gleaned from them can inform practice and prevent problems in the future.

Conclusion

It is apparent that the practice of cybercounseling through videoconferencing is a different experience compared to face-to-face counseling. Evidently, cybercounseling entails more than just access to technology and the ability to use it. Rather, cybercounseling involves adapting the technology to the counseling process and the needs of the mental health field so that it serves as a vehicle to expand services for clients.

As this form of cybercounseling is in the initial stages, there is a need for further investigation into this process. Such investigations can provide greater understanding about the process, practice and effectiveness of this modality. As Sampson, et al. (1997) suggest, the counseling profession needs to proactively address the application of cybercounseling to mental health concerns. If and when cybercounseling becomes an acceptable form of counseling, it will not be because counselors have necessarily embraced the concept, but rather because there is an increasing demand for this new and different modality from clients.

The authors thank Audie Willis and Wendy Firven for their assistance with this project.

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Chapter Seventeen

Incorporating Distance Learning into Counselor Education Programs: A Research Study

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Studies examining the use of computer-enhanced counselor education date back to 1984 (e. g., Alpert, 1986; Harris-Bowlsbey, 1984). Since that time computer technology has evolved steadily and many counselor educators now are using resources such as the World Wide Web (Hansen & Gladfelter, 1996; Hara, Bonk, & Angeli, 2000; Lundberg, 2000; Stadtlander, 1998) and computer software (Alpert, 1986; Harris-Bowlsbey, 1984) to enhance course content and delivery. Formerly known as computer-assisted training, distance learning is the terminology in current usage. However, a literature review indicates few empirical studies addressing how distance learning is utilized in contemporary counselor education programs.

The professional literature has focused on two phases of distance learning: "computer-assisted training" and "distance education." Computer-assisted training (Furlong & Hayden, 1993; Gale, Dotson, Huber, Nagireddy, Manders, Young, & Carter, 1995) has been defined as a teaching modality that incorporates the use of computer software in addition to the traditional classroom environment. Computer-assisted training also includes computer simulation (Isaacs, Constenbader, Reading-Brown, & Goodman, 1992; Lambert, Hedlund & Vieweg, 1990) that allows counseling students to perform their functions as a counselor with a virtual client (Isaacs et al., 1992; Lambert, et al., 1990).

The current professional literature reflects that "distance education" or "distance learning" is comprised of both computer-mediated and online communication (Hansen & Gladfelter, 1996; Hara et al., 2000, Lundberg, 2000; Stadtlander, 1998). Computer-mediated and online communication is delivered through audio and visual technology to students who are separated by place or time (Bobby & Capone, 2000).

The professional literature has addressed several strengths and weaknesses with respect to distance learning. Distance learning allows the instructor to utilize many tools such as CD ROMS, video, interactive teaching, audio components, computer presentations, linking, graphics, movies, auto-scoring for tests, a test bank of questions, practice tests, in-class e-mails, class chat rooms, and web calendars (Altekruse & Brew, 2000). According to Burn (1995, as cited in Anakwe, et al., 1999), distance learning is utilized due to its "cost effectiveness" and "resource maximization" (p.224). It was also reported that increased enrollment in the majority of universities could help offset the shrinking classroom (Stadtlander, 1998; Altekruse & Brew, 2000) which has, in turn, enhanced revenue and allowed universities to gain a competitive edge (Anakwe et al., 1999) in the current $2.5 billion a year business (Primary Research Group, 2001). It has also been suggested that distance learning would be a viable solution for meeting instructional demands in times of increased enrollment (Altekruse & Brew, 2000).

Evidence suggests that in some cases students in distance learning environments learn in 70% less time than students in traditional classroom environments (Parlangeli, Marchigiani, & Bagnara, 1999). The amount of time saved through using distance learning was also recognized as one of the most critical attributes of computer-mediated communication (Hara et al., 2000). Allowing the students more time to process ideas through activities via the computer resulted in student contributions that involved the use of deeper levels of cognition (Hara et al., 2000). Finally, taking and attending classes from one's home via online instruction is both convenient and accessible for all students, including those with hearing and mobility impairments (Hansen & Gladfelter, 1996). Some of the disadvantages of distance learning included difficulty with software upgrades, the ease with which students can cheat, the emphasis placed on student motivation due to the flexibility with due dates, home computer limitations, time-consuming and costly course changes, testing difficulties, and link changes (Altekruse & Brew, 2000). Stadtlander (1998) conducted an online graduate-level psychology seminar with nine participants and found critical weaknesses associated with online learning: differences in personality among the students, instructor availability, and difficulty directing class discussion on the part of the instructor. Students' expectations often required the instructor to respond more frequently than time permitted. Students became frustrated if he did not respond within hours even though the instructor checked his e-mail once a day.

Limitations of previous studies of distance learning included small sample sizes and no control groups. The sample sizes have ranged from 9 (Stadtlander, 1998) to 56 (Lundberg, 2000). In every known case, the research was conducted at one institution. With the exception of Hansen & Gladfelter (1996) who evaluated 17 different seminars, the research conducted was confined to one class or seminar. To date, no studies have been conducted that examine the number of counselor education programs using distance learning. There are also no current data regarding how counselor education programs are using computer technology to deliver courses. Furthermore, counselor educator perceptions of and attitudes about using distance learning need to be assessed.

In this study, all Council for the Accreditation of Counseling and Related Educational Programs (CACREP) counseling programs, as well as other administrative units identified by Hollis and Wantz (1993), were surveyed thus targeting a sample size that approximates the population. This study as compared to previous studies is more comprehensive in scope. The purpose of this study is to determine the number of counselor education programs that utilize distance learning, to identify the distance learning software delivery products used, and to identify features of software used. We also attempted to identify faculty perceptions related to and experience with the importance of distance learning; the impact of distance learning on counselor education programs in terms of quality and enrollment, recruitment practices, course development time commitment, supervision issues, and faculty compensation; and ethical and legal issues.

In this study, distance learning is defined as any type of technology utilized outside of the traditional face-to-face classroom instruction. This study makes a distinction between courses that are delivered 100% via distance learning and courses taught in the classroom that are augmented by distance learning (e.g., technology- or web-enhanced).

Method

Participants

Participants in this study were counselor educators in 416 institutions offering graduate counseling programs of study. In the first phase of data collection, one representative in each of the counselor education programs in the state of Ohio was targeted (n=20). In the second phase of data collection, participants were program representatives of institutions within the North Central Association of Counselor Educators and Supervisors (NCACES) geographic area (n=70), excluding those in Ohio. Participants in the third phase of data collection consisted of institutions across the nation that are accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) (n= 90). Institutions belonging to either of the two previous target groups were excluded. The final stages of data collection targeted all remaining institutions within the U.S. that offer graduate counselor education programs for which a faculty member e-mail address could be obtained.

Procedure

Data collection occurred through an online 15-item Distance Learning Survey (DLS) that was e-mailed to counselor educators. The directions and terms of consent to participate in the study were outlined in the e-mail cover letter introducing the study. Included in the letter of introduction was a URL for accessing the DLS. Confidentiality and anonymity of participant responses to the DLS were described in the cover letter. The respondents were asked to answer for their institution's counselor education program or to forward the DLS to a faculty member who was willing to complete the survey. If an incomplete or inconsistent response (e.g., more than one person from the same program responded) was submitted to the researchers, a follow-up e-mail message invited the individual to complete the unanswered questions or clarify the inconsistency. If no response was received within ten business days, the researchers contacted (via e-mail) another faculty member from that program using the same protocol described above. Responses were submitted online to the first author and collected and stored in FileMaker Pro 5.5.

Results

Thirty-one percent (n=127) of the 416 counselor education programs surveyed responded. Responses were received from 39 states and the District of Columbia. Counselor education programs from Ohio (n=15), California (n=11), Illinois (n=9) and Indiana (n=9) responded the most frequently. One response was received from only one counselor education program in fifteen states. Responses to the DLS were entered into SPSS 10.1 and analyzed.

The following is an examination of the results from the DLS. Fifty-eight percent (n=74) of the respondents reported not currently utilizing distance learning as a form of instruction in their counselor education programs. Fifty-three respondents (42%) indicated that distance learning was currently employed as a form of instruction.

Fifty-three percent of the respondents indicated no current plans to implement distance learning existed. Thirty-four percent had discussed distance learning but had not yet set a timetable for implementation. Eleven percent reported having plans to implement distance learning within the next two years. One percent indicated having plans to implement a distance learning program at some point beyond the next two years.

Twenty-three respondents reported offering one or more courses that were technology- or web- enhanced with distance learning, e.g., students meet face-to-face with the instructor at some point(s) during the course and received supplemental enhancement to their traditional class. Examples might include chapter study guides, course lecture notes, quizzes and examinations, on-line chats, discussion boards and hyperlinks for URLs available on-line. Eleven respondents reported offering one or more courses via 100% distance learning technology, e.g., students do not meet face-to-face with the instructor and received the entire course on-line. Twelve respondents reported offering both forms of distance learning instruction.

Respondents indicated that Blackboard and WebCT were the most frequently utilized course delivery software products (Table 1). Three types of interactive delivery features were used most frequently: interactions between faculty and student, interactions between student and student, and interactions between student and learning material. Four types of communication and information dissemination features were reported as being employed: e-mail, WWW sites, bulletin/discussion boards, and keyboard entry chat rooms. Seven types of learning activities are being used most frequently: reading assignments, discussion sessions, case studies, research assignments, group projects, and problem solving assignments. The most frequently utilized assessment features were evaluation of papers, participation, and examinations (Table 1).

Table 1
Software Products and Distance Learning Delivery Features Utilized in Counselor Education Programs

Software Product Category	n
Software Product N=46	
Blackboard	24
WebCT	17
ECollege.com	3
Integrated Virtual Learning Environment (IVLE), WebMentor	2
Softarc FirstClass	1
Asymetrix Librarian, Convene, Eduprise.com, Embanet, IMSeries, IntraLearn, The Learning Manager, Lotus Learning Space, LUVIT, Milken Educator Virtual Workspace (MEVW), Serf, Symposium, TopClass, Virtual-U	0
Other	131

Table 1 (cont.)

Interaction Feature N=49	
Between faculty and student	48
Between teaching assistant and student	8
Between student and student	36
Between student and learning material	38
Other	0
Communication Feature N=49	
Bulletin/discussion board	30
Chat-keyboard	23
Chat-voice	5
E-mail	48
Listserve	1
Video conferencing	12
Whiteboard (drawing tool for online discussion)	5
WWW site	31
Distance Learning Activity N=49	
Case studies	36
Discussion sessions	39
E-lectures	19
Group projects	25
Problem solving assignments	25
Reading assignments	43
Research assignments	26
Role play assignments	8
Other	0
Assessment feature N=49	
Examinations	33
Papers	38
Participation	38
E-presentations (individual and group)	17
E-projects (individual and group)	18
Other	0

Thirty-four percent of the respondents indicated 100-300 clock hours were required to develop a course delivered 100% on-line by distance learning technology. Eighteen percent indicated 300-500 clock hours were required for course development and a significantly smaller percentage of respondents reported the task required other amounts of time ranging between 100 and 1,500 clock hours (Table 2).

Respondents indicated that 54% received no compensation for developing and delivering distance learning courses. Twenty-two percent received released time from other teaching and about 18% received monetary compensation for developing and delivering distance learning courses (Table 2).

None of the respondents indicated distance learning was regarded as more important than traditional methods of instruction. Seventeen (34%) reported distance learning was regarded as equally important as traditional methods of instruction and 33 (66%) reported distance learning was regarded as less important than traditional methods of instruction (Table 2).

Table 2
Number of Clock Hours Required to Develop 100% Distance Learning Courses, Compensation of Faculty for Delivery of Distance Learning, and Faculty's Perceptions of the Importance of Distance Learning

Category	n	Percentage
Number of clock hours required to develop a 100% distance learning course		
Less than 100 hours	5	10
Between 100 to 300 hours	17	34
Between 300 to 500 hours	9	18
Between 500 to 700 hours	3	6
Between 700 to 900 hours	1	2
Between 900 to 1100 hours	3	6
Between 1100 to 1300 hours	0	0
Between 1300 to 1500 hours	1	2
More than 1500 hours	1	2
Not applicable	9	18
Method of Faculty Compensation for Delivery of Distance Learning Services		
No compensation provided	27	54
Released time from teaching	11	22
Monetary compensation	9	18

Table 2 (cont.)

Category	n	Percentage
Faculty perceptions of the importance of distance learning		
More important than traditional methods of instruction	0	0
Equally as important as traditional methods of instruction	17	34
Less important than traditional methods of instruction	33	66

N=50 institutions responded to these categories. In the second category, participants had the option of selecting more than one response.

Table 3 displays the results of respondents' perceptions of the impact distance learning had on the quality of instruction. Forty-eight percent reported no change in the quality of instruction resulted from utilizing distance learning methods. Thirty-eight percent reported the quality of instruction had somewhat increased, 8% reported the quality of instruction had somewhat decreased, 4% reported the quality of instruction had greatly increase, and 2% reported a great decrease in the quality of instruction.

Table 3
Opinions on the Impact of Distance Learning on the Quality of Instruction

Impact on Instruction	n	%	Rank
Greatly increased	2	4	4
Somewhat increased	19	38	2
Neither increased nor decreased	24	48	1
Somewhat decreased	4	8	3
Decreased	1	2	5

N=50 institutions

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Fifty-two percent of the respondents indicated the number of students enrolled had not changed as a result of utilizing distance learning. Thirty percent of the respondents indicated enrollment had increased, 16% did not know if student enrollment had changed, and 2% indicated that enrollment had decreased.

Fifty-two percent of the counselor educators surveyed reported the department faculty had not made any special efforts to recruit distance learning students, i.e., no student recruitment marketing program had been implemented. When a recruitment method was employed, brochures (28%) were the most common recruitment method reported. Other reported recruitment methods were faculty interactions and exchanges with other higher education institutions (24%), WWW (24%), radio and television advertisements (2%), and announcements in national publications (2%). Respondents had the option of selecting more than one recruitment method (Table 4).

Table 4
Recruitment Methods for Distance Learning Students

Recruitment Method	**n**	**%**
No special effort is made to recruit distance learning students	26	52
Announcements in local publications	9	18
Announcements in state publications	5	10
Announcements in regional publications	3	6
Announcements in national publications	1	2
Announcements in international publications	0	0
ACA publications	2	4
Brochures	14	28
Mass mailings	5	10
Faculty interaction and exchanges with higher education institutions	12	24
E-mail Announcements	7	14
WWW site	12	24
Posters and flyers	9	18
Radio advertisements	0	0
Television advertisements	0	0
Recruitment fairs	4	8
Other	5	

N=50 institutions. Participants had the option of selecting more than one response.

Respondents were queried regarding whether or not they conduct supervision and consultation with practicum and internship counselor trainees via distance leaning. Sixty-two percent of the respondents reported not conducting supervision and consultation with practicum and internship trainees via distance learning. Thirty-eight percent reported conducting supervision and consultation via distance learning.

Respondents were asked about how academic advising was being conducted with distance learning students. Table 5 illustrates that academic advising was conducted most frequently via e-mail (76%), telephone (52%) and face-to face conferences (50%). Live audio and video chats were utilized infrequently as modes through which academic advising was conducted.

Table 5
Academic Advising Methods Used with Distance Learning Students

Method	n	%	Rank
Via e-mail	38	76	1
Via face to face conference	25	50	3
Via live audio chat	1	2	5
Via live video chat	2	4	4
Via telephone	26	52	2

N=50 institutions. Participants had the option of selecting more than one response.

Seventy-two percent of the respondents reported no ethical and/or legal issues had surfaced as a result of offering courses via distance learning. Eight (16%) indicated confidentiality, six (12%) respondents reported cheating, and four (8%) identified copyright infringements were ethical and/or legal issues that had surfaced.

Table 6
Ethical and/or Legal Issues Resulting from Utilizing Distance Learning

Presence of Legal and/or Ethical Issues	n	Percentage
No legal and/or ethical issues	36	72
Legal and/or ethical issues related to		
Student cheating	6	12
Confidentiality	8	16
Copyright infringements	4	8
Other cause(s)	0	

Table 7 contains categorized responses to the question, "What are your personal concerns, reactions, perceptions about distance learning?" Responses regarding these reactions, concerns, and perceptions that counselor educators have about distance learning were first reduced into discrete units of communication, according to a specific set of predetermined rules suggested by Williamson, Karp, Dalphin, Gray, Barry, and Dorr (1982). This investigation used a referential unit of analysis (Krippendorf, 1980). Each complete thought regarding a specific personal concern, reaction, or perception about distance learning was categorized. And, procedures for developing categories used by Johnson (1986) were followed. Table 7 contains the resulting categories that were established and their definitions.

As can be seen in this table, the majority of responses contained personal concerns. The chief concerns reported had to do with the impact of distance learning on quality training, assessment of students' progress in a program, and clinical supervision of students. Issues of what types of courses are, or are not, appropriate for distance learning were also reported as concerns. These comments contained concern about "skills-based" or "techniques" courses and practicum/internship courses being offered online. There was a fairly even distribution of positive, negative, and mixed reactions reported about the use of distance learning in counselor education. The perceptions reported by a small number of respondents denoted observations of differences that faculty noticed between conducting class online versus face-to-face. General comments reflecting the status of distance learning in counselor education currently and in the future were also reported by a small number of respondents. The two least reported categories of responses were those that contained neutral comments (e.g., comments that reported only how a program is, or is planning on, using distance learning) and responses that denoted uncertainty about distance learning in counselor education.

Table 7
Categorized Responses to the Question, "What are your personal concerns, reactions, perceptions about distance learning?"

Category	Definition	%*
Personal Concerns	Concerns about the transition from face-to-face to distance learning in terms of students getting quality training, supervision, and being able to adequately	28

Table 7 (cont.)

	assess students' progress (e.g., "readiness" for professional practice).	
	Issues identified surrounding the use of distance learning for certain courses. For example, "Certain courses (e.g., counseling techniques) do not lend themselves to distance-only learning and would require some face-to-face contact."	20
	Issues identified surrounding the time, training, support and/or compensation for implementing distance learning. For example, ". . . lack of faculty compensation and faculty time" and "Faculty aversion to technology . . . "	13

Category	**Definition**	**%***
Reactions	Positive attitudes about use of distance learning in counselor education.	15
	Negative attitudes about use of distance learning in counselor education.	13
	Mixed reactions (e.g., respondent's statement contained both positive and negative attitudes). For example, "Difficult to do foundational counseling courses such as techniques or practica but good for advanced students e.g., advanced case conceptualization and also good for at least web enhanced courses in foundational areas such as learning, biological bases of behavior, statistics and research, etc.	15

Table 7 (cont.)

Perceptions	Observations made about students when teaching courses 100% online or web-enhanced. For example, "It takes 3-4 times as long to have a discussion via written chatroom than by voice or in classroom because students can speak much faster than they can type, send, and receive comments" and "Students seem to participate more than in a traditional classroom setting. They have more time to process and respond when the interaction is asynchronous."	10
General comments	e.g., conclusions made about distance learning. For example, "By the very nature of the helping process, distance learning will have its place, but to a more limited scope than other credential areas." and "Insufficient evidence is available that person to person interaction can be replaced by interaction on the Internet."	5
Neutral	Responses that reported only how a program was using distance learning currently or how it was planning to use distance learning.	8
Undecided	Respondent's comment reflected uncertainty. For example, "We are still debating which courses can be offered via Distance Education and resisting the 'lure' of embracing new technology simply for its own sake."	5

**n=40 institutions responded. Total does not equal 100% due to multiple responses.*

Discussion

Distance learning appears not to be widely accepted within counselor education. Of the 127 institutions that responded to the survey, slightly more than half (58%) reported no utilization of any type of distance learning as a form of instruction. The majority (53%) of the 74 institutions that reported not using distance learning, indicated that they had no plan to implement distance learning into their programs.

Counselor education is being delivered in various formats with respect to technology. Some programs offer some courses entirely online, other courses were offered mixed mode (partially online and in the traditional classroom), and classroom only. Half of the counselor education programs that reported using distance learning indicated courses are offered using web enhancement or distance learning technology along with traditional face-to-face instruction. About one-fourth of the programs (24%) reported courses are offered entirely using distance learning technology, while approximately the same number of the programs (26%) reported offering web-enhanced courses or offering courses entirely via distance learning. This indicates that although not all counselor educators have gone to the extreme of developing 100% distance learning courses, technology is being used to enhance existing courses. Blackboard and WebCT were the most frequently utilized online course delivery software products.

Counselor educators indicated that the average number of clock hours spent developing a distance learning course was between 100 and 300 clock hours. Future studies might wish to compare the number of clock hours required to develop distance learning courses to the number of clock hours it takes to develop a traditional course. In addition, because many distance learning courses are developed from already developed traditional courses that are modified to fit a distance learning format, future studies may attempt to determine the number of hours spent developing actual course content versus the number of hours spent working to modify the course to a format compatible with distance learning. The amount of time required to maintain a distance learning course (grading, consultation, etc.) compared to the amount of time necessary to maintain a traditional course may also prove to be a point of interest.

Over 50% of the respondents reported receiving no compensation for time spent learning HTML program language, or developing, maintaining or delivering distance learning courses. About one fifth reported receiving either monetary compensation or released time from teaching. Perhaps if compensation for extra work were more frequently offered, distance learning courses would become more popular and prevalent.

The results showed that none of the counselor educators considered distance learning to be more important than traditional methods of instruction. Thirty-four percent regarded distance learning equally important to traditional methods of instruction. The majority (66%) regarded distance learning as less important than traditional methods of instruction. These statistics may also change if more educators are provided compensation for development of distance learning courses.

Results indicate that almost 50% of the institutions reported no change in quality of instruction with the addition of distance learning courses, and 38% reported quality of instruction as being somewhat improved. These numbers are not too discouraging, but may also change if counselor educators are compensated more regularly for extra time spent developing and maintaining distance learning courses.

While the majority (52%) of the institutions that utilized distance learning reported no change in enrollment, respondents also indicated no systematic marketing programs were employed to recruit students. Thirty percent of the institutions utilizing distance learning reported an increase in enrollment. Only 2% reported a decrease in enrollment attributed to distance learning. It must be noted that the magnitude of these changes was not reported and one certainly cannot assume that all changes in enrollment are a direct result of the availability of distance learning courses.

Brochures, faculty interaction with other higher education institutions, and web sites were the most frequently utilized methods for recruiting distance learning students. Most institutions (60%) reported that consultation and supervision for internship and practicum trainees was not conducted via distance learning. However, their counterpart (about 40%) did conduct such consultation and supervision via distance learning.

Academic advising was reported to occur most frequently via e-mail (76%), followed by telephone (54%), and face-to face (50%) communication. Live audio and video chats were not reported to be popular methods of conducting academic advising with distance learning students.

Seventy-two percent of the counselor educators reported no ethical and/or legal issues resulting from employing distance learning. In instances where ethical and/or legal issues did surface with distance learning, student cheating, confidentiality issues, and copyright infringements were cited.

Regarding the reactions, concerns, and perceptions that counselor educators have about distance learning, among the most commonly cited concerns was the inappropriateness of the distance learning format for classes featuring application of skills and techniques. There was an indication that the distance learning format may be more appropriate for content classes and was frowned upon for classes requiring supervision. Also frequently mentioned as a drawback was the lack of compensation for time devoted to learning programming language, and developing, maintaining and delivering distance learning courses.

Some limitations of this study include a sample size that would prove more representative were it increased, and the fact that since we received a response from only one representative (counselor educator) of each program. It cannot be assumed that all counselor educators within a given institution would respond uniformly to the survey.

Currently almost half of the institutions preparing professional counselors employ distance learning technology and it is estimated that within five years the majority of counselor education programs will be utilizing distance learning. Based on this, the following recommendations for counselor education programs considering implementing distance learning into their curricula can be made: 1) Conduct a feasibility study in one's counselor education program to determine if adequate finances, computer technology for both faculty and students, and access to course delivery software necessary exist to effectively implement and deliver distance learning courses. In addition, the availability of distance learning instructional design staff to assist faculty in development and delivery is also highly recommended. 2) A counselor education program would need to ensure that both faculty and students were given adequate training to utilize the course delivery system. 3) Program developers should consult with other counselor educators who are using distance learning in their course work. A counselor education distance learning resource directory is currently being compiled for this purpose. 4) Those considering implementing a counselor education distance learning in the future need to be mindful of any developing standards with respect to program accreditation.

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Chapter Eighteen

Interpersonal Communication in Behavioral Telehealth: What Can We Learn from Other Fields?

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In this paper, research about mediated communication is used to shed light on questions that have arisen in relation to behavioral telehealth about the relative merits of different modes of distance communication for the transaction of behavioral telehealth services. The paper is in two parts. The first part contains a presentation of questions and issues about mediated communication that have been posed by behavioral telehealth researchers. In the second part, research about mediated communication from the fields of information science, group communication, social psychology, human-computer interaction, applied communication research, computer-mediated communication, business management, special education, and telephone communication is used to clarify these questions and issues.

Interpersonal Communication in Behavioral Telehealth

Definitions

Telehealth, the use of communications and information technologies to deliver physical and mental health services and transmit health information over long and short distances, is currently being seen as a way to increase equality of access to health care by eliminating barriers of distance, time, geography, and cost to people who require specialized care. Behavioral telehealth refers to telehealth services designed for the provision of mental health care.

Telehealth is in ascendancy at present, but it is not a new phenomenon. Telecommunications technologies such as telephones and radios have been used to facilitate health care from a distance for many decades (Carvings, 1984). Recently, however, the advent of the Internet and the general expansion in North America of the telecommunications infrastructure has sparked a renewed interest in telehealth (Lugg, 1998). Advanced technologies such as high-bandwidth lines, satellites, and powerful computers are now being used for distance delivery of health care services, for transfer of health information, and for consultations among clinicians in different locations. Preliminary studies of distance mental health programs that have employed advanced technologies-and that have focused primarily on full-speed, two-way videoconferencing-have shown promising results for expanding access to services (e.g., Doze, Simpson, Hailey & Jacobs, 1999; Mannion, L., Fahy, T. J., Duffy, C., Broderick, M., & Gethins, E., 1998; Mielonen, Ohinmaa, Moring & Isohanni, 1998). However, it is not clear that high-tech telehealth can be cost-effective (Brown, 1995; Lugg, 1998). Videoconferencing requires the capture and transmission of full-speed moving images and therefore requires more complex equipment and much greater transmission capacities than audio-only (e.g., telephone) or text-only (e.g., e-mail) communication. Thus, the introduction of expensive technologies works against the goal of widening access to health care and making more equitable use of available resources. The lack of clear evidence of the cost effectiveness of high-tech telehealth programs has caused some telehealth researchers to advocate the use of less technologically complex methods of telehealth delivery (Della Mea, 1999; Elford, 1998; Grigsby & Sanders, 1998). However, the general trend in telehealth continues to be in the direction of videoconferencing and ever more sophisticated technology. In the second part of the paper evidence is presented that challenges the assumption that video communication is necessarily superior to other forms of distance communication and explanations for a persistent preference for videoconferencing in spite of this evidence are considered.

Issues in Behavioral Telehealth

The recent expansion of telehealth has elicited both enthusiasm and trepidation. Proponents see it as a way to overcome barriers to access, to bring down health care costs, to increase availability of health-related information, and to make health care more available to groups that historically have been underserved such as the elderly, people in rural and remote regions, and people with mobility constraints. However, this enthusiasm is not universally shared. Among mental health professionals, reservations about telehealth have focused on two issues: (a) confidentiality and (b) the quality of mediated therapeutic interaction.

Confidentiality. Information and interpersonal communications that are transmitted via telecommunications technologies such as telephones, fax machines, e-mail, or videoconferencing are considered more vulnerable to interceptions and breaches of confidentiality than information and communications that are exchanged directly without technological mediation (Bloom, 1998; Childress, 1998; Powell, 1998; Sampson, Kolodinsky, & Greeno, 1997; Seeman & Seeman, 1999; Sussman, 1998).

The difference may have more to do with the existence of laws and ethical guidelines that have been created to protect the confidentiality of traditional forms of communication than with inherent differences between mediated and non-mediated communication, and it may be that as new laws and guidelines are put into place the difference will disappear. However, for the present, confidentiality is a grave concern.

Mediated communication. Highly personal, direct communication has traditionally been seen as a key ingredient of many types of mental health treatment (counseling, psychotherapy, etc.) and there is a general expectation that health care services will be very individualized and personal (Birch, Rigby, & Roberts, 2000). The idea that a therapy session or a psychiatric consultation could happen between people who are not in the same place goes against fundamental assumptions about mental health treatment and about the role of shared physical presence and face-to-face contact. Consequently mediated forms of communication can easily be dismissed as inappropriate for the provision of mental health care.

Behavioral telehealth researchers have done a lot to counter the skepticism about using mediated communication for mental health care and have tried to demonstrate both theoretically and empirically that a lack of shared physical presence and of face-to-face contact are not insurmountable obstacles. In 1997, Sampson, Kolodinsky, and Greeno published a hypothetical analysis of the potentials and pitfalls of telecounseling that illuminated the possibilities of the Internet and other technologies for counseling, psychoeducation and counseling supervision. This analysis created a foundation for subsequent efforts (e.g., Laszlo, Esterman, and Zabko, 1999) to understand the advantages and disadvantages of delivering mental health care from a distance using various telecommunication technologies (e-mail, videoconferencing, etc.) and to envision ways to conduct behavioral telehealth successfully. These efforts have included identifying ethical issues pertaining to behavioral telehealth (e.g., Seeman and Seeman, 1999) and the development of ethical guidelines (e.g., Bloom, 1998).

Researchers interested in modes of communication for behavioral telehealth other than videoconferencing have been trying to determine if/how counseling or therapy sessions can be conducted using media that provide no visual contact with the other person. There is wide agreement that a lack of visual cues is a significant consideration, however, there are differing opinions about the effects of a lack of visual contact. Some behavioral telehealth practitioners and researchers have noted that a lack of visual information can make it hard to understand nuanced communication (Laszlo et al., 1999), conduct online groups (Colòn, 1999), and make certain kinds of diagnoses (Childress, 1998; Murphy & Mitchell, 1998). Others maintain that it is possible to compensate verbally for the missing visual information, and argue that if clinical approaches are adapted to the telehealth medium, mediated sessions can be just as successful or more successful than face-to-face sessions (Curran & Church, 1999; Murphy & Mitchell, 1998). In has been suggested that in the absence of visual contact, there can be a feeling of freedom from the clinician's judgmental gaze that is disinhibiting and favors self-disclosure (Childress, 1998; Curran & Church, 1999; King & Moreggi, 1998; Laszlo et al., 1999; Powell, 1998; Sampson et al., 1997). Related to this is the idea that this protection from visual judgment could reduce intimidation and reluctance to seek professional help (Childress, 1998; Doze et al., 1999; Sussman, 1998). Additionally, it has been proposed that it may be easier for a client to focus on the task at hand when there are fewer visual distractions and when there is less concern about social appearances (Colòn, 1999). It is important to point out that disadvantages of no visual contact that have been noted are disadvantages from the clinician's point of view (e.g., difficulty in making a diagnosis) and that potential advantages have been described in terms of benefits to the client (e.g., protection from a judgmental gaze).

Explorations of the pros and cons of various modes of communication for behavioral telehealth have highlighted subtle differences between different forms of mediated communication, and have shown that it is not simply a matter of comparing face-to-face and distance communication. Text-only communication such as e-mail has different qualities than telephone communication even though neither one provides visual cues; videoconferencing is different from teleconferencing; synchronous (real-time) communication such as speech communication via telephone has different qualities than asynchronous (delayed) communication such as e-mail, and so on. Given the well-recognized importance of non-verbal cues to interpersonal communication, it is tempting to categorize modes of communication according to whether or not there is visual contact that allows the communicating parties to see each other's non-verbal expressions. On this basis, face-to-face communication and videoconferencing would be seen as equivalent, and modes of communication such as e-mail, telephoning, writing, etc. that do not allow for visual contact would be seen as equivalent. Clearly, there are problems with this categorization. One is that not all non-verbal conversational cues are visual. Speech contains a rich array of non-verbal information in the form of inflection, tone of voice, pauses, etc. (Haas, Benedict & Kobos, 1996; Hines, 1994; Lago, 1996). Text-only communication also contains non-verbal information, and can contain more than is usual if an effort is made to provide it (Murphy &

Mitchell, 1998). Another problem is that direct face-to-face contact does more than provide access to non-verbal cues. Shared physical presence can provide things such as a feeling of safety, support, and motivation that may be unrelated to visual cues (Graetz et al., 1998). Although there may be ways to compensate verbally for the lack of visual communication information-there is no question as to whether blind people can successfully offer or receive mental health services (Hines, 1994)-the question about whether shared physical presence is essential is more difficult to answer (Barak, 1999; Doze et al., 1999; Lago, 1996; Sampson et al., 1997). In the second part of the paper differences between modes of communication are explored in greater detail.

Behavioral Telehealth Research

Research about behavioral telehealth is sparse and is considered to be lagging behind developments that have been occurring in practice. However, there have been some empirical studies, as well as numerous case reports about telehealth pilot projects, that provide concrete evidence to back up the claim that behavioral telehealth is a viable concept in spite of the lack of direct contact. Pilot studies have been conducted to determine whether mediated communication can be as effective as in-person communication for psychiatric consultations (e.g., Ball, McLaren, Summerfield, Lipsedge & Watson, 1995; Yellowlees & Kennedy, 1996; Zaylor, 1999), brief psychotherapy (Day & Schneider, 2000; Schneider, 1999), and counseling for anxiety (Cohen & Kerr, 1998). These preliminary studies have not shown deleterious effects of mediation or lack of proximity. Surprisingly, they have not shown significant differences between, audio, video, and in-person modes of communication on measures such as relationship formation, therapeutic outcomes, and client satisfaction. Neither have they shown that more complex technologies are better suited to behavioral telehealth than simpler technologies. The potential for successful provision of distance mental health services has been claimed more or less equally for telephones, videophones, and all forms of videoconferencing, although people reporting on telephone and online services have been able to make the strongest claims about being able to reach people who, without these service options, would not be using the health care system at all (e.g., Zhu, Tedeschi, Anderson & Pierce, 1996).

Research from Other Fields

The research studies discussed in this part of the paper are explorations of different forms of mediated communication, a term that refers to person-to-person interaction in which a technology is interposed and is integral to the communication (Cathcart & Gumpert, 1990). Mediated communication can either be synchronous, which is to say without a time delay, or a synchronous, which is to say with a delay between the time a message is transmitted and the time it is received. Examples of synchronous mediated communication are telephone conversations, CB radio exchanges, computer chat conversations, and communication by computer decision support systems. Asynchronous forms of mediated communication include e-mail, letters, and audio and video recordings. The primary focus of the following discussion is synchronous mediated communication, with some attention given to asynchronous (text-only) computer-mediated communication.

The discussion is organized around the following two questions: (a) Why have behavioral telehealth researchers found so little measurable difference between face-to-face, audio, text-only, and video communication? (b) Why is there a tendency for behavioral telehealth developers to favor video communication?

The research discussed here is in the form of experiments, literature reviews, and meta-analyses, drawn from a range of disciplines. Most of it tests and/or challenges the following assumptions about mediated communication:

1. Mediated communication is "restricted" compared to face-to-face communication and therefore inferior (e.g., Chapanis, Ochsman, Parrish & Weeks, 1972).
2. Visual signals are a necessary aspect of interpersonal communication.
3. Effects on communication due to the medium are constant over time.
4. Forms of communication that have fewer "channels" of communication (e.g., verbal, visual, aural, gestural) will favor greater task focus and will minimize socioemotional communication and therefore the development of relational ties (e.g., Sproull & Kiesler, 1996).
5. Forms of communication that are "richer" (i.e., that have more channels, that allow more senses to be utilized, that provide immediacy and feedback, and that have the capacity for natural language) feel warmer and more personal and therefore are preferred.

Looking for Differences Between Modes of Communication

The question of whether and how interpersonal communication is affected by the communication medium that is being used has been a source of research interest for some time. In general, researchers have found smaller media effects than predicted, and the differences between communication media that have been found have not fallen in line with prevailing assumptions about mediated communication (see above). Overall, the research does not support the assumption that face-to-face communication is always superior to mediated communication, nor that visual cues are essential to interpersonal communication.

In two early studies in which four modes of interactive communication (typewriting, handwriting, voice-only, and face-to-face) were compared for problem-solving tasks, Chapanis et al. (1972, 1977) found only minor differences across modes, and differences that were found contradicted assumptions about the benefits of multiple channels of communication. For example, Chapanis et al. predicted that when people are not able to see each other and therefore are not able to use gestures as well as words to communicate, they would need to use more words to accomplish their tasks, because things that normally would be expressed non-verbally would need to be put into words. Instead, fewer words were used and the tasks were completed just as quickly. The fact that the ability to use gestures did not automatically reduce the number of words that was used nor improve the effectiveness of the communication called into question the role of visual signals in speech communication and showed that more research was needed about the relationship of verbal and non-verbal communication. Similarly, an early meta-analysis of experimental comparisons of face-to-face and mediated communication (Williams, 1977) revealed that although clear differences between written and spoken communication had been measured, studies conducted up to that point had not shown clear differences in speed and effectiveness between face-to-face and synchronous mediated communication. On the whole, audio-only had been found to be faster than face-to-face communication and just as effective as both face-to-face and video communication.

More recent studies have yielded similar results. For example, in a laboratory study with 54 undergraduate students in which three modes of communication (face-to-face, teleconferencing, and computer messaging) were compared to see how the mode of communication would affect therapeutic interactions, Szeli (1995) found that participants rated all three modes equally for informality and ease of communication, contradicting the assumption that mediated communication is more formal and less personal. In a study comparing these same three modes of communication for group information sharing tasks, Graetz, Boyle, Kimble, Thompson, & Garloch (1998) found teleconferencing and face-to-face communication to be equivalent for accuracy of speed of task completion (computer messaging was slower because of typing time), and that people in the teleconferencing groups had the most favorable impressions of their groups.

Doherty-Sneddon, Anderson, O'Malley, Langton, Garrod, & Bruce (1997) also found no significant differences between face-to-face, audio, and video communication on measures of task performance on tasks for which benefits of face-to-face had been demonstrated in previous studies. In contrast to Chapanis (1972, 1977), however, they found that more words were used when visual contact was missing, particularly for the purpose of checking for understanding. Their study showed how verbal communication can be substituted for visual communication when there is no visual contact. One of their conclusions was that people are flexible communicators, using either verbal or visual strategies as permitted to achieve the same dialogue functions. In this study, the communication process was explored as well as communication outcomes. One of the conditions created for the study was high quality videoconferencing that allowed the people communicating to see each other's eye movements as well as other fine-grained details of facial expressions that are usually not visible during video communication. This condition produced results that provided important insights into the nature of video communication. When people could see each other's eyes, they spent more time looking at each other than when eye movements were not visible, and they looked at each other at times when it would be expected based on behavior during face-to-face communication, for example, when it was time to check for understanding. However, the fact that people could see each other's eye movements, and looked at each other's eyes at times when confirmation of understanding was being sought, did not keep people from simultaneously using verbal strategies for this dialogue function. They used the kinds of verbal strategies that were used in conditions that did not provide eye contact and were not used in the direct face-to-face condition. The fact that they were using these verbal strategies did not keep them from looking at each other's eyes as if to communicate visually. The researchers called this over-gazing and speculated that people seemed to think that they would be able to use visual signals in the same way as in face-to-face communication and attempted to do this, but were not able to. The visual signals did not seem to bring the same benefits as in face-to-face. In particular, they did not seem to facilitate listener understanding in the same way. This suggests that even when videoconferencing provides all the visual information that would be available during direct face-to-face communication, it is not equivalent. Rather, there may be subtle limitations to video communication that could explain why it does not automatically outshine other, less rich, modes of mediated communication.

Walther (1996) has argued that it is wrong to assume that the medium of communication produces specific effects and determines the quality of the communication, or that effects associated with the medium will remain constant. Walther, Anderson, and Park (1994) conducted a meta-analysis of research about social interaction and interpersonal communication in the context of text-only computer-mediated communication that significantly challenged these two assumptions. They tested the idea that computer-mediated communication is inherently impersonal (task-oriented) as compared to face-to-face communication and that it necessarily constrains socially oriented communication. They found that although researchers had identified these effects, they only appeared in studies in which novices used computer-mediated communication systems in artificial time-restricted situations. In studies in which time was not constricted, these particular effects did not appear. Effects such as task-orientation that were observed in studies in which people used a new medium just once were not observed in studies in which people had already been using the medium. Walther relates this to his Social Information Processing theory, which holds that people using any communication medium experience similar needs for uncertainty reduction and affinity, and in mediated modes of communication will adapt their ways of communicating over time to favor "the solicitation and presentation of socially revealing, relational behavior" (p. 465) in order to meet these needs without letting the communication medium stand in the way.

The claim that any differences in the personal and social dimensions of face-to-face and mediated communication are differences in rate, not differences in inherent qualities of the communication modes was supported by a subsequent study conducted by Chidambaram (1996), who investigated ways in which attitudes and task outcomes change over time for people using text-only computer decision support systems anonymously and ways intragroup relational links form for people using this kind of mediated communication. The study was designed to specifically test two ideas: (a) that the use of computer support systems minimizes socio-emotional interaction and (b) that the effects of a communication medium are constant over time. Twenty-eight five-member groups, half using a computer support system, half communicating face-to-face, met four times over four weeks for 90 minutes each time to do business-related decision making tasks. After each session, self-report questionnaires were used to measure "cohesiveness," "perceptions of process," and "satisfaction with outcome." The results showed that by the end of the four weeks, levels of relational intimacy for the people using mediated communication were equivalent to the levels for the face-to-face groups, and that the degree to which people felt restricted by the mediated mode of communication decreased significantly with time. This study provided additional evidence that restriction imposed by single-channel (text-only) communication is not enough to block socio-emotional communication and the formation of relational ties.

Advantages of Mediated Communication

One thing that may help explain the lack of measurable superiority of face-to-face communication over other mediated modes is that there may be advantages as well as disadvantages to not being able to see and be seen by the other person and to not having in-person contact. Potential advantages that have been identified focus on visual cues and protection from judgment.

Various researchers have shown that people feel less vulnerable and freer to speak when they cannot be seen (e.g., Fish, 1990; Graetz et al., 1998; Weinberg, 1996). In a quasi-experiment designed to determine whether computer-mediated communication (synchronous computer chat) can provide the same type of supportive atmosphere as face-to-face communication, Weinberg (1996) found no significant differences between the two modes on measures of "supportiveness" and "helpfulness," but did find differences on measures of "callousness" in that people in face-to-face conditions rated themselves as more guarded and careful than people in the computer chat condition, and rated their communication partners as more judgmental. Similarly, in a laboratory experiment in which 37 groups of undergraduate students were given an information sharing task to complete in one of three modes of communication-face-to-face, teleconferencing, and synchronous computer chat-Graetz et al. (1998) found that people in the telephone groups expressed the highest levels of cohesion ("people expressing the same ideas") and the lowest levels of inhibition ("keeping one's own ideas private"). In a study designed to determine differences in individual influence and decision making quality in three communication modes-face-to-face, teleconferencing, and computer chat-Citera (1998) found that less dominating people were more able to influence decisions when communicating by telephone or computer.

In a series of experiments comparing the ways groups make decisions using computer conferences, e-mail, or face-to-face discussions, Sproull and Keisler (1996) found that people using text-only computer-mediated communication expressed themselves more frankly and had interactions that were not dominated by one or two people as is common in face-to-face discussions. Sproull and Keisler suggest that in situations in which social cues are absent or weak, people can stop worrying about how other people are evaluating them and therefore can devote less time and effort to posturing and social niceties, with the result that they will be more open and honest. According to Sproull and Keisler (1996) and to Walther (1996), when it is not necessary to monitor the other person's visual and social cues, attention can be freed up for focusing on the communication tasks at hand. Weinberg (1996) also found that the absence of distracting visual cues had an enhancing effect on the mediated communication in her study of supportiveness and mediated communication.

Walther (1996) coined the term hyperpersonal communication to describe mediated communication that surpasses face-to-face communication in its ability to enhance social and emotional interpersonal communication. He offers a number of reasons why even text-only communication is sometimes more intimate and socially oriented than face-to-face communication. These include: (a) idealization, which is to say the tendency for people to inflate their perceptions of people they do not see, using the few social cues they have to create a positive image of the person with whom they are communicating; (b) the possibly for people to optimize their self-presentations by being selective about what they will and will not reveal, especially early on; (c) the fact that more attention can be devoted to the specifics of the communication when attention is not being used for handling the intricacies of a face-to-face social interaction; and (d) the possibility of what he calls an intensification loop of positive reciprocation, whereby people who are addressed as if they are attractive and socially desirable (because of being invisible) will tend to behave that way.

Still a Preference for Videoconferencing

Industry pressure. It is beyond the scope of this chapter to analyze the role of high-tech telecommunications companies in influencing the direction of telehealth development. However, this influence needs to be mentioned. There is a great deal of money to be made by selling expensive telecommunications equipment to hospitals and other health care customers and therefore there is an incentive for telecommunications companies to sponsor telehealth initiatives that involve high-tech equipment. There is much less incentive to sponsor telehealth initiatives that involve already existing technologies such as telephones. This in itself constitutes a powerful influence on the field of telehealth and an explanation for the trend toward high-speed two-way videoconferencing rather than less expensive options.

Familiarity and assumed superiority. It is widely assumed that interpersonal communication that includes visual contact is superior to communication that doesn't include visual contact, and therefore that videoconferencing is superior to text or audio modes that do not provide a view of the other person. A general preference for richer media (that have a greater number of cue systems, immediacy of feedback, capacity for natural language, and more senses utilized) could account for the tendency to favor videoconferencing for behavioral telehealth, regardless of the effects it has on communication.

Disinhibition and indirect communication. The research just discussed challenges the assumption that visual contact is always helpful and supports the idea that people may feel more freedom to express themselves when they cannot be seen by or see the other person. If mediated forms of communication do provide a feeling of protection from judgment and do foster disinhibition, this could have special relevance for people who feel vulnerable or who are shy. The possibility of using mediated communication to facilitate interpersonal expression for these people could have important ramifications for counseling and psychotherapy. However, there may be factors that keep this positive potential from being fully embraced, in particular, the tendency in contemporary mainstream Western culture to take a negative view of a reluctance to speak directly.

Adjustment time. Adjustment time is another factor that could help explain the preference for videoconferencing. Research has shown that with time people using even single channel forms of mediated communication can attain levels of personal communication, affiliation, and relationship development that are similar to or better than with face-to-face communication. However, someone beginning to use a new mode of mediated communication may have no way of sensing that this will happen, and may evaluate the communication mode according to how it feels initially.

The invisibility of telephones. There may be a variety of cultural tendencies that uphold a preference for direct face-to-face communication and hence for videoconferencing. This preference may be more theoretical than actual, however, and may not carry over into people's behaviors and day-to-day choices. Telephones, and more recently, e-mail, are used very freely. Although e-mail may be seen as a way to shield oneself, this does not seem to be the case for telephones, which have been enormously popular for a long period of time. Videophones on the other hand (which would allow people to see a video image of the person they are telephoning) were introduced in the 1960s but have never been successful (Edigo, 1990).

In studies comparing face-to-face and video communication, audio-only communication is often included as a point of comparison. Typically, speech communication emerges as being equally as effective as face-to-face and video communication (see above). But this does not necessarily lead researchers to the conclusion that telephones should or could be used for the purpose being studied (e.g., Day & Schneider, 2000). Considering that telephones are already in place and are relatively inexpensive to operate, it is surprising that the apparent strengths of speech communication are not given more prominence.

Communication researchers have noted that telephones have been a subject of scholarly neglect and that they remain transparent and invisible even though interest in mediated communication is high (Fish, 1990; Westmyer, DiCioccio & Rubin, 1998). The research reviewed for this paper offers no explanation for this. However, various explanations can be imagined. In the following paragraphs, three possibilities are explored.

According to Fish (1990) the feeling of privacy and protection from a judgmental gaze that is afforded by telephones is enhanced by the intimacy that comes from the way telephones are used. The telephone receiver is held in a zone of intimacy that surrounds the face, in particular the lips and the ear. Senses other than sight (touch, hearing, smell) are important in zones of intimacy, which may explain why people feel comfortable without visual contact when they are communicating by telephone (Cathcart & Gumpert, 1990). According to Fish, this feeling of intimacy can minimize feelings of exposure and vulnerability and help people to disclose and to be more probing with their verbal interaction. However, this sense of intimacy may work against a general perception that the telephone can be a tool for important work in the business and health care domains.

In addition to the assumption that visuals are essential to speech communication, there seems to be an assumption that more complex technologies are better at mediating distance communication than simpler technologies. Telephones give the impression of being simple and may have fallen out of the technology spotlight for this reason.

Mediated communication has both a technological and a human dimension. The human dimension that is comprised of such things as communication skills, organization, and coordination of the tasks tends to be invisible, even though it may be more essential to the success of the work than the technological dimension (Robertson, 1997; Stamm, 1998; Yellowlees & Kennedy, 1996). The technological dimension typically garners most of the attention. Robertson has argued that the reason the human skills involved in mediated communication get overlooked is that they are types of skills that have traditionally been in the domain of women's work, which often is unpaid and culturally invisible. If telephones appear to have a much greater human dimension than a technological dimension, and if the human dimension has the characteristics of women's work, this could cause telephones to be relatively invisible in telecommunications discourse.

Limitations

In the preceding section, possible explanations for a persistent preference for videoconferencing in spite of the lack of empirical evidence to support this preference have been explored. Some limitations of the research that supports these possible explanations need to be mentioned. A limited number of research studies were reviewed for this paper, and the studies were drawn from a range of disciplinary domains. The aggregate value of the research is somewhat limited by its diversity because of differences in methodologies, measures, and assumptions. Only a few dimensions can be investigated in each study. It may be that video communication is indeed superior on dimensions that are important to behavioral telehealth but that have not yet been investigated.

Most of the comparisons of different modes of communication were conducted in artificial settings, often with students. In real-life settings there would be many more social and contextual variables to consider (Er & Ng, 1995; Kline & McGrath, 1999) such that research conducted in these settings. might produce a very different picture.

A further limitation to this discussion is that issues of age, culture, and gender were not considered in the research that was reviewed. It is well known that all three of these factors can have a profound influence on communication preferences and patterns. An analysis that took these factors into account is probably needed in order to arrive at a clear understanding of differences between mediated and non-mediated communication. Another factor that was not considered was geographical separation. Preliminary research has shown that mediated communication is affected by perceptions of how far away the other person is. In a laboratory simulation, Moon (1998) found that dishonesty increased with perceived distance, and that the likelihood of being persuaded decreased. It is easy to assume that mediation eliminates distance as a factor, but this may not be the case.

Conclusion

The research discussed in the second part of this paper does not provide definitive answers to the two questions that guided the analysis (Why have behavioral telehealth researchers found so little measurable difference between face-to-face, audio, text-only, and video communication? Why is there a tendency for behavioral telehealth developers to favor video communication?), but it does provide some clues and some ideas that could be helpful to behavioral telehealth developers. The research discussed here indicates that the five assumptions about mediated communication listed at the beginning of the second part should not be taken as fixed truths. It appears that people are able to adapt to different modes of communication, especially over time, without the mode of communication dictating absolutely what will and will not be possible. There may be advantages as well as disadvantages to mediated forms of communication that could be capitalized on for specific purposes.

Given these two ideas, that people are flexible communicators and that modes of mediated communication may have advantages as well as disadvantages, a possible avenue for behavioral telehealth developers is one that maximizes the flexibility and choice of communication mode. For example, a videoconferencing service could include the possibility of audio-only teleconferencing for some situations.

If indeed people are flexible communicators who can adapt well to various modes of communication-the popularity of cellphones strongly supports this view-then an argument can be made for using modes of communication for telehealth that will do the most to promote increased access to services, namely inexpensive modes and/or technologies that are already in place, such as telephones. There is wide agreement that telehealth has the potential to make mental health services more available to people who have been underserved, and that it is necessary now more than ever to make changes within the health care system that will promote both cost reductions and equality of access. An important paradox exists, however. In many cases, it is the people who have easy access to health care services who also have access to advanced telecommunications technologies (computers, high-speed lines, videoconferencing facilities)-by virtue of living in major urban areas. Many of the people in the groups that have been underserved probably do not have access to advanced telecommunications technologies in their homes or in their communities. Stamm (1998) makes the point that if the goal of increased equality of access is to be reached, telehealth standards should not be based on the high infrastructure urban areas, as this could work to prevent services from reaching low infrastructure urban areas where telehealth may hold the most promise.

As behavioral telehealth research accumulates, it is becoming clear that the type of technology that is used is probably less of a factor in determining the success of the communication and of the particular telehealth service than the ways in which the technology is used (Stamm, 1998; Yellowlees & Kennedy, 1996). The lack of evidence of distinct differences between modes of communication is congruent with this perspective and lends credence to the idea that it is important in behavioral telehealth to make the most of whatever form of communication is being used by giving attention to the human side of the communication (e.g., providing training in mediated communication), rather than letting all the attention go to the technology that is allowing the communication to occur, as can so easily happen.

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APPENDIX 1

ETHICAL STANDARDS FOR INTERNET ON-LINE COUNSELING of the AMERICAN COUNSELING ASSOCIATION

Approved by the ACA Governing Council, October 1999
Available at http://www.counseling.org/resources/internet.htm

These guidelines establish appropriate standards for the use of electronic communication over the Internet to provide on-line counseling services and should be used only in conjunction with the latest ACA Code of Ethics & Standards of Practice.

CONFIDENTIALITY

a. Privacy Information.

Professional counselors ensure that clients are provided sufficient information to adequately address and explain the limitations of (i) computer technology in the counseling process in general and (ii) the difficulties of ensuring complete client confidentiality of information transmitted through electronic communications over the Internet through on-line counseling. (See A.12.a., B.1.a., B.1.g.)

1. SECURED SITES: To mitigate the risk of potential breaches of confidentiality, professional counselors provide one-on-one on-line counseling only through "secure" Web sites or e-mail communications applications which use appropriate encryption technology designed to protect the transmission of confidential information from access by unauthorized third parties.

2. NON-SECURED SITES: To mitigate the risk of potential breaches of confidentiality, professional counselors provide only general information from "non-secure" Web sites or e-mail communications applications.

3. GENERAL INFORMATION: Professional counselors may provide general information from either "secure" or "non-secure" Web sites, or through e-mail communications. General information includes non-client-specific, topical information on matters of general interest to the professional counselor's clients as a whole, third-party resource and referral information, addresses and phone numbers, and the like. Additionally, professional counselors using either "secure" or "non-secure" Web sites may provide

"hot links" to third-party Web sites such as licensure boards, certification bodies, and other resource information providers. Professional counselors investigate and continually update the content, accuracy and appropriateness for the client of material contained in any "hot links" to third-party Web sites.

4. LIMITS OF CONFIDENTIALITY: Professional counselors inform clients of the limitations of confidentiality and identify foreseeable situations in which confidentiality must be breached in light of the law in both the state in which the client is located and the state in which the professional counselor is licensed.

b. Informational Notices.

1. SECURITY OF PROFESSIONAL COUNSELOR'S SITE: Professional counselors provide a readily visible notice that (i) information transmitted over a Web site or e-mail server may not be secure; (ii) whether or not the professional counselor's site is secure; (iii) whether the information transmitted between the professional counselor and the client during on-line counseling will be encrypted; and (iv) whether the client will need special software to access and transmit confidential information and, if so, whether the professional counselor provides the software as part of the on-line counseling services. The notice should be viewable from all Web site and e-mail locations from which the client may send information. (See B.1.g.)

2. PROFESSIONAL COUNSELOR IDENTIFICATION: Professional counselors provide a readily visible notice advising clients of the identities of all professional counselor(s) who will have access to the information transmitted by the client and, in the event that more than one professional counselor has access to the Web site or e-mail system, the manner, if any, in which the client may direct information to a particular professional counselor. Professional counselors inform clients if any or all of the sessions are supervised. Clients are also informed if and how the supervisor preserves session transcripts. Professional counselors provide background information on all professional counselor(s) and supervisor(s) with access to the on-line communications, including education, licensing and certification, and practice area information. (See B.1.g.)

3. CLIENT IDENTIFICATION: Professional counselors identify clients, verify identities of clients, and obtain alternative methods of contacting clients in emergency situations.

c. Client Waiver.

Professional counselors require clients to execute client waiver agreements stating that the client (i) acknowledges the limitations inherent in ensuring client confidentiality of information transmitted through on-line counseling and (ii) agrees to waive the client's privilege of confidentiality with respect to any confidential information transmitted through on-line counseling that may be accessed by any third party without authorization of the client and despite the reasonable efforts of the professional counselor to arrange a secure on-line environment. Professional counselors refer clients to more traditional methods of counseling and do not provide on-line counseling services if the client is unable or unwilling to consent to the client waiver. (See B.1.b.)

d. Records of Electronic Communications.

Professional counselors maintain appropriate procedures for ensuring the safety and confidentiality of client information acquired through electronic communications, including but not limited to encryption software; proprietary on-site file servers with fire walls; saving on-line or e-mail communications to the hard drive or file server computer systems; creating regular tape or diskette back-up copies; creating hard-copies of all electronic communications; and the like. Clients are informed about the length of time for, and method of, preserving session transcripts. Professional counselors warn clients of the possibility or frequency of technology failures and time delays in transmitting and receiving information. (See B.4.a., B.4.b.)

e. Electronic Transfer of Client Information.

Professional counselors electronically transfer client confidential information to authorized third-party recipients only when (i) both the professional counselor and the authorized recipient have "secure" transfer and acceptance communication capabilities, (ii) the recipient is able to effectively protect the confidentiality of the client confidential information to be transferred; and (iii) the informed written consent of the client, acknowledging the limits of confidentiality, has been obtained. (See B.4.e., B.6.a., B.6.b.)

ESTABLISHING THE ON-LINE COUNSELING RELATIONSHIP

a. The Appropriateness of On-Line Counseling.

Professional counselors develop an appropriate in-take procedure for potential clients to determine whether on-line counseling is appropriate for the needs of the client. Professional counselors warn potential clients that on-line counseling services may not be appropriate in certain situations and, to the extent possible, informs the client of specific limitations, potential risks, and/or potential benefits relevant to the client's anticipated use of on-line counseling services. Professional counselors ensure that clients are intellectually, emotionally, and physically capable of using the on-line counseling services, and of understanding the potential risks and/or limitations of such services. (See A.3.a., A.3.b.)

b. Counseling Plans.

Professional counselors develop individual on-line counseling plans that are consistent with both the client's individual circumstances and the limitations of on-line counseling. Professional counselors shall specifically take into account the limitations, if any, on the use of any or all of the following in on-line counseling: initial client appraisal, diagnosis, and assessment methods employed by the professional counselor. Professional counselors who determine that on-line counseling is inappropriate for the client should avoid entering into or immediately terminate the on-line counseling relationship and encourage the client to continue the counseling relationship through an appropriate alternative method of counseling. (See A.11.b., A.11.c.)

c. Continuing Coverage.

Professional counselors provide clients with a schedule of times during which the on-line counseling services will be available, including reasonable anticipated response times, and provide clients with an alternate means of contacting the professional counselor at other times, including in the event of emergencies. Professional counselors obtain from, and provide clients with, alternative means of communication, such as telephone numbers or pager numbers, for back-up purposes in the event the on-line counseling service is unavailable for any reason. Professional counselors provide clients with the name of at least one other professional counselor who will be able to respond to the client in the event the professional counselor is unable to do so for any extended period of time. (See A.11.a.)

d. Boundaries of Competence.

Professional counselors provide on-line counseling services only in practice areas within their expertise and do not provide on-line counseling services to clients located in states in which professional counselors are not licensed. (See C.2.a., C.2.b.)

e. Minor or Incompetent Clients.

Professional counselors must verify that clients are above the age of minority, are competent to enter into the counseling relationship with a professional counselor, and are able to give informed consent. In the event clients are minor children, incompetent, or incapable of giving informed consent, professional counselors must obtain the written consent of the legal guardian or other authorized legal representative of the client prior to commencing on-line counseling services to the client.

LEGAL CONSIDERATIONS

Professional counselors confirm that their liability insurance provides coverage for on-line counseling services, and that the provision of such services is not prohibited by or otherwise violate any applicable (i) state or local statutes, rules, regulations, or ordinances; (ii) codes of professional membership organizations and certifying boards; and/or (iii) codes of state licensing boards.

Professional counselors seek appropriate legal and technical assistance in the development and implementation of their on-line counseling services.

APPENDIX 2

STANDARDS FOR THE ETHICAL PRACTICE OF INTERNET COUNSELING of the NATIONAL BOARD FOR CERTIFIED COUNSELORS

Adopted November 3, 2001
Available at http://www.nbcc.ethics/webethics.htm

These standards govern the practice of Internet counseling and are intended for use by counselors, clients, the public, counselor educators, and organizations that examine and deliver Internet counseling. These standards are intended to address *practices* that are unique to Internet counseling and Internet counselors and do not duplicate principles found in traditional codes of ethics.

These Internet counseling standards of practice are based upon the principles of ethical practice embodied in the NBCC Code of Ethics. Therefore, these standards should be used in conjunction with the most recent version of the NBCC ethical code. Related content in the NBCC Code are indicated in parentheses after each standard.

Recognizing that significant new technology emerges continuously, these standards should be reviewed frequently. It is also recognized that Internet counseling ethics cases should be reviewed in light of delivery systems existing at the moment rather than at the time the standards were adopted.

In addition to following the NBCCÆ Code of Ethics pertaining to the practice of professional counseling, Internet counselors shall observe the following standards of practice:

Internet Counseling Relationship

1. In situations where it is difficult to verify the identity of the Internet client, steps are taken to address impostor concerns, such as by using code words or numbers.
2. Internet counselors determine if a client is a minor and therefore in need of parental/guardian consent. When parent/guardian consent is required to provide Internet counseling to minors, the identity of the consenting person is verified.
3. As part of the counseling orientation process, the Internet counselor explains to clients the procedures for contacting the Internet counselor when he or she is off-line and, in the case

of asynchronous counseling, how often e-mail messages will be checked by the Internet counselor.

4. As part of the counseling orientation process, the Internet counselor explains to clients the possibility of technology failure and discusses alternative modes of communication, if that failure occurs.
5. As part of the counseling orientation process, the Internet counselor explains to clients how to cope with potential misunderstandings when visual cues do not exist.
6. As a part of the counseling orientation process, the Internet counselor collaborates with the Internet client to identify an appropriately trained professional who can provide local assistance, including crisis intervention, if needed. The Internet counselor and Internet client should also collaborate to determine the local crisis hotline telephone number and the local emergency telephone number.
7. The Internet counselor has an obligation, when appropriate, to make clients aware of free public access points to the Internet within the community for accessing Internet counseling or Web-based assessment, information, and instructional resources.
8. Within the limits of readily available technology, Internet counselors have an obligation to make their Web site a barrier-free environment to clients with disabilities.
9. Internet counselors are aware that some clients may communicate in different languages, live in different time zones, and have unique cultural perspectives. Internet counselors are also aware that local conditions and events may impact the client.

Confidentiality in Internet Counseling

10. The Internet counselor informs Internet clients of encryption methods being used to help insure the security of client/counselor/supervisor communications.

    Encryption methods should be used whenever possible. If encryption is not made available to clients, clients must be informed of the potential hazards of unsecured communication on the Internet. Hazards may include unauthorized monitoring of transmissions and/or records of Internet counseling sessions.

11. The Internet counselor informs Internet clients if, how, and how long session data are being preserved.

    Session data may include Internet counselor/Internet client e-mail, test results, audio/video session recordings, session notes, and counselor/supervisor communications. The likelihood of electronic sessions being preserved is greater because of the ease and decreased costs involved in recording. Thus, its potential use in supervision, research, and legal proceedings increases.

12. Internet counselors follow appropriate procedures regarding the release of information for sharing Internet client information with other electronic sources.

    Because of the relative ease with which e-mail messages can be forwarded to formal and casual referral sources, Internet counselors must work to insure the confidentiality of the Internet counseling relationship.

Legal Considerations, Licensure, and Certification

13. Internet counselors review pertinent legal and ethical codes for guidance on the practice of Internet counseling and supervision.

    Local, state, provincial, and national statutes as well as codes of professional membership organizations, professional certifying bodies, and state or provincial licensing boards need to be reviewed. Also, as varying state rules and opinions exist on questions pertaining to whether Internet counseling takes place in the Internet counselor's location or the Internet client's location, it is important to review codes in the counselor's home jurisdiction as well as the client's. Internet counselors also consider carefully local customs regarding age of consent and child abuse reporting, and liability insurance policies need to be reviewed to determine if the practice of Internet counseling is a covered activity.

14. The Internet counselor's Web site provides links to websites of all appropriate certification bodies and licensure boards to facilitate consumer protection.

Appendix 3

Guidelines for the Use of the Internet for Provision of Career Information and Planning Services of the National Career Development Association

Approved by the NCDA Board of Directors, October 1997
Available at http://ncda.org/about/polnet.html

Developed by members of the NCDA Ethics Committee:

Dr. David Caulum, Don Doerr, Dr. Pat Howland, Dr. Spencer Niles, Dr. Ray Palmer, Dr. Richard Pyle (Chair), Dr. David Reile, Dr. James Sampson, and Dr. Don Schutt

- Introduction
- Guidelines for Use of the Internet for Delivery of Career Counseling and Career Planning Services
- Professional and Ethical Guidelines Related to the Use of the Internet for Job Posting and Searching
- Unacceptable Counselor Behaviors on the Internet
- Need for Research and Review

Introduction

Based on readily-available capabilities at the time of this writing, the Internet could be used in four ways for the purpose of providing career counseling and/or career planning services to clients. These are:

1. To deliver information about occupations, including their descriptions, employment outlook, skills requirements, estimated salary, etc. through text, still images, graphics, and/or video. In this event, the standards for information development and presentation are the same as those for print materials and audiovisual materials as stated in NCDA's documents on these matters.
2. To provide online searches of occupational databases for the purpose of identifying feasible occupational alternatives. In this event, the standards developed by NCDA and the

Association of Computer-based Systems for Career Information (ACSCI) apply.

3. To deliver interactive career counseling and career planning services. This use assumes that clients, either as individuals or as part of a group, have intentionally placed themselves in direct communication with a professional career counselor. Standards for use of the Internet for these purposes are addressed in this document.
4. To provide searches through large databases of job openings for the purpose of identifying those that the user may pursue. Guidelines for this application are included in this document.

Guidelines for Use of the Internet for Delivery of Career Counseling and Career Planning Services

Career planning services" are differentiated from "career counseling" services. Career planning services include an active provision of information designed to help a client with a specific need, such as review of a resumÈ; assistance in networking strategies; identification of occupations based on interests, skills, or prior work experience; support in the job-seeking process; and assessment by means of online inventories of interest, abilities, and/or work-related values. Although "Career Counseling" may include the provision of the above services, the use of the term implies a deeper level of involvement with the client, based on the establishment of a professional counseling relationship and the potential for dealing with career development concerns well beyond those included in career planning.

Multiple means of online provision of career planning or career counseling services currently exist, the most common of which are e-mail, newsgroups, bulletin boards, chat rooms, and websites offering a wide variety of services. Telephone or audiovisual linkages supported by the Internet exist in their infancy, and will likely grow in potential as the technology improves and the costs decline.

1. Qualifications of Developer or Provider

Websites and other services designed to assist clients with career planning should be developed with content input from professional career counselors. The service should clearly state the qualifications and credentials of the developers not only in the content area of professional career counseling, but also in the development of interactive online services.

2. Access and Understanding of Environment

The counselor has an obligation to be aware of free public access points to the Internet within the member's community, so that a lack of financial resources does not create a significant barrier to clients accessing counseling services or information, assessment or instructional resources over the internet.

The counselor has an obligation to be as aware as possible of local conditions, cultures, and events that may impact the client.

3. Content of Career Counseling and Planning Services on the Internet

The content of a website or other service offering career information or planning services should be reviewed for the appropriateness of content offered in this medium. Some kinds of content have been extensively tested for online delivery due to the long existence of computer-based career information and guidance systems. This includes searching of databases by relevant search variables; display of occupational information; development of a resumÈ; assessment of interests, abilities, and work-related values and linkage of these to occupational titles; instruction about occupational classification systems; relationship of school majors to occupational choices; and the completion of forms such as a financial needs assessment questionnaire or a job application.

When a website offers a service which has not previously been extensively tested (such as computer-based career guidance and information systems), this service should be carefully scrutinized to determine whether it lends itself to the Internet. The website should clearly state the kinds of client concerns that the counselor judges to be inappropriate for counseling over the Internet, or beyond the skills of the counselor.

4. Appropriateness of Client for Receipt of Services via the Internet

The counselor has an ethical and professional responsibility to assure that the client who is requesting service can profit from it in this mode. Appropriate screening includes the following:

a. A clear statement by clients of their career planning or career counseling needs.

b. An analysis by the counselor of whether meeting those needs via Internet exchange is appropriate **and** of whether this particular client can benefit from counseling services provided in this mode. A judgment about the latter should be made by means of a telephone or videophone teleconference designed to specify the client's expectations, how the client has sought to meet these through other modes, and whether or not the client appears to be able to process information through an Internet medium.

5. Appropriate Support to the Client

The counselor who is providing services to a client via the Internet has ethical responsibility for the following:

a. Periodic monitoring of the client's progress via telephone or videophone teleconference.
b. Identification by the counselor of a qualified career counselor in the client's geographic area should referral become necessary. If this is not possible, the web counselor using traditional referral sources to identify an appropriate practitioner, should assist the client in the selection of a counselor.
c. Appropriate discussion with the client about referral to face-to-face service should the counselor determine that little or no progress is being made toward the client's goals.

6. Clarity of Contract with the Client

The counselor should define several items in writing to the client in a document that can be downloaded from the Internet or faxed to the client. This document should include at least the following items:

a. The counselor's credentials in the field.
b. The agreed-upon goals of the career counseling or career planning Internet interchange.
c. The agreed-upon cost of the services and how this will be billed.
d. Where and how clients can report any counselor behavior which they consider to be unethical.
e. Statement about the degree of security of the Internet and confidentiality of data transmitted on the Internet and about any special conditions related to the client's personal information (such as potential transmission of client records to a supervisor for quality-control purposes, or the collection of data for research purposes).
f. A statement of the nature of client information electronically stored by the counselor, including the length of time that data will be maintained before being destroyed.
g. A statement about the need for privacy when the client is communicating with the counselor, e.g., that client communication with the counselor is not limited by having

others observe or hear interactions between the counselor and client.

h. If the service includes career, educational, or employment information, the counselor is responsible for making the client aware of the typical circumstances where individuals need counseling support in order to effectively use the information.

7. Inclusion of Linkages to Other Websites

If a career information or counseling website includes links to other websites, the professional who creates this linkage is responsible for assuring that the services to which his or hers are linked also meet these guidelines.

8. Use of Assessment

If the career planning or career counseling service is to include online inventories or tests and their interpretation, the following conditions should apply:

a. The assessments must have been tested in computer delivery mode to assure that their psychometric properties are the same in this mode of delivery as in print form; or the client must be informed that they have not yet been tested in this same mode of delivery.

b. The counselor must abide by the same ethical guidelines as if he or she were administering and interpreting these same inventories or tests in face-to-face mode and/or in print form.

c. Every effort must be exerted to protect the confidentiality of the user's results.

d. If there is any evidence that the client does not understand the results, as evidenced by e-mail or telephone interchanges, the counselor must refer the client to a qualified career counselor in his or her geographic area.

e. The assessments must have been validated for self-help use if no counseling support is provided, or that appropriate counseling intervention is provided before and after completion of the assessment resource if the resource has not been validated for self-help use.

Professional and Ethical Guidelines Related to the Use of the Internet for Job Posting and Searching

1. The posting must represent a valid job opening for which those searching on the Internet have an opportunity to apply.

2. Job postings must be removed from the Internet database within 48 hours of the time that the announced position is filled.

3. Names, addresses, resumes, and other information that may be gained about individuals should not be used for any purposes other than provision of further information about job openings.

Unacceptable Counselor Behaviors on the Internet

1. Use of a false e-mail identity when interacting with clients and/or other professionals. When acting in a professional capacity on the Internet, a counselor has a duty to identify him/herself honestly.

2. Accepting a client who will not identify him/herself and be willing to arrange for phone conversation as well as online interchange.

3. "Sharking" or monitoring chat rooms and bulletin board services, and offering career planning and related services when no request has been made for services. This includes sending out mass unsolicited e-mails. Counselors may advertise their services but must do so observing proper "netiquette" and standards of professional conduct.

Need for Research and Review

Since the use of the Internet is new for the delivery of career planning and counseling services, it is mandatory that the career counseling profession gain experience with this medium and evaluate its effectiveness through targeted research. The capabilities of Internet delivery of services will expand rapidly as the use of sound and video becomes more feasible. These early guidelines will need constant monitoring and revision as research data become available and additional capabilities become cost-feasible.

NCDA opposes discrimination against any individual on the basis of race, ethnicity, gender, sexual orientation, age, mental/physical disability, or creed.

Revised by the NCDA Board of Directors, April 1994.

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Appendix 4

CODE OF CONDUCT (HONcode) of the HEALTH on the NET FOUNDATION

Available at: http://www.hon.ch/HONcode

Introduction

The Health on the Net Foundation Code of Conduct (HONcode) for medical and health Web sites addresses one of Internet's main healthcare issues: the reliability and credibility of information.

The Internet has become one of the most widely-used communication media. With the availability of Web server software, anyone can set up a Web site and publish any kind of data which is then accessible to all.

The problem is therefore no longer finding information but assessing the credibility of the publisher as well as the relevance and accuracy of a document retrieved from the Net.

In many cases, a given Web site provides no appropriate documentation regarding the scientific design of a medical study, nor are studies made available that support given claims.

The Health On the Net Foundation has elaborated the Code of Conduct to help standardise the reliability of medical and health information available on the World-Wide Web.

The HONcode is not an award system, nor does it intend to rate the quality of the information provided by a Web site. It only defines a set of rules to:

- hold Web site developers to basic ethical standards in the presentation of information;
- help make sure readers always know the source and the purpose of the data they are reading.

Principles

Authority

Any medical or health advice provided and hosted on this site will only be given by medically trained and qualified professionals unless a clear statement is made that a piece of advice offered is from a non-medically qualified individual or organisation.

Complementarity

The information provided on this site is designed to support, not replace, the relationship that exists between a patient/site visitor and his/her existing physician.

Confidentiality

Confidentiality of data relating to individual patients and visitors to a medical/health Web site, including their identity, is respected by this Web site. The Web site owners undertake to honour or exceed the legal requirements of medical/health information privacy that apply in the country and state where the Web site and mirror sites are located.

Attribution

Where appropriate, information contained on this site will be supported by clear references to source data and, where possible, have specific HTML links to that data. The date when a clinical page was last modified will be clearly displayed (e.g. at the bottom of the page).

Justifiability

Any claims relating to the benefits/performance of a specific treatment, commercial product or service will be supported by appropriate, balanced evidence in the manner outlined above in Principle 4..

Transparency of authorship

The designers of this Web site will seek to provide information in the clearest possible manner and provide contact addresses for visitors that seek further information or support. The Webmaster will display his/her E-mail address clearly throughout the Web site.

Transparency of sponsorship

Support for this Web site will be clearly identified, including the identities of commercial and non-commercial organisations that have contributed funding, services or material for the site.

Honesty in advertising & editorial policy

If advertising is a source of funding it will be clearly stated. A brief description of the advertising policy adopted by the Web site owners will be displayed on the site. Advertising and other promotional material will be presented to viewers in a manner and context that facilitates differentiation between it and the original material created by the institution operating the site.

Appendix 5

APA STATEMENT ON SERVICES BY TELEPHONE, TELECONFERENCING, AND INTERNET

The American Psychological Association's Ethics Committee issued the following statement on November 5, 1997, based on its 1995 statement on the same topic.

Available at http://www.apa.org/ethics/stmnt01.html

The Ethics Committee can only address the relevance of and enforce the "Ethical Principles of Psychologists and Code of Conduct" and cannot say whether there may be other APA Guidelines that might provide guidance. The Ethics Code is not specific with regard to telephone therapy or teleconferencing or any electronically provided services as such and has no rules prohibiting such services. Complaints regarding such matters would be addressed on a case by case basis.

Delivery of services by such media as telephone, teleconferencing and internet is a rapidly evolving area. This will be the subject of APA task forces and will be considered in future revision of the Ethics Code. Until such time as a more definitive judgment is available, the Ethics Committee recommends that psychologists follow Standard 1.04c, Boundaries of Competence, which indicates that "In those emerging areas in which generally recognized standards for pre- paratory training do not yet exist, psychologists nevertheless take reasonable steps to ensure the competence of their work and to protect patients, clients, students, research participants, and others from harm." Other relevant standards include Assessment (Standards 2.01 -2.10), Therapy (4.01 - 4.09, especially 4.01 Structuring the Relationship and 4.02 Informed Consent to Therapy), and Confidentiality (5.01 - 5.11). Within the General Standards section, standards with particular relevance are 1.03, Professional and Scientific Relationship; 1.04 (a, b, and c), Boundaries of Competence; 1.06, Basis for Scientific and Professional Judgments; 1.07a, Describing the Nature and Results of Psychological Services; 1.14, Avoiding Harm; and 1.25, Fees and Financial Arrangements. Standards under Advertising, particularly 3.01 - 3.03 are also relevant.

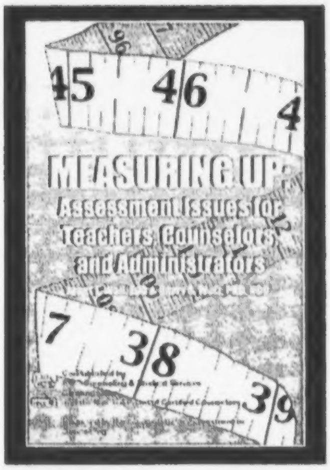
Psychologists considering such services must review the characteristics of the services, the service delivery method, and the provisions for confidentiality. Psychologists must then consider the relevant ethical standards and other requirements, such as licensure board rules.

Measuring Up:

Assessment Issues for Teachers, Counselors, and Administrators

Janet E. Wall, EdD & Garry R. Walz, PhD, NCC
Editors

Published by ERIC/CASS & NBCC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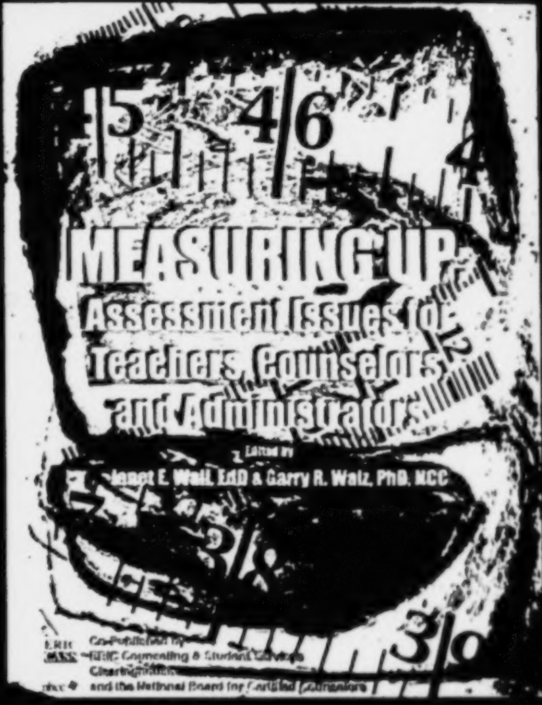

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Edited by

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Co-Published by
ERIC Counseling & Student Services Clearinghouse
and the National Board for Certified Counselors

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ISBN 1-56109-103-0
9 781561 091034

CAPS Press
A Division of Counseling Outfitters
PO Box 35077
Greensboro, NC 27425-5077

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